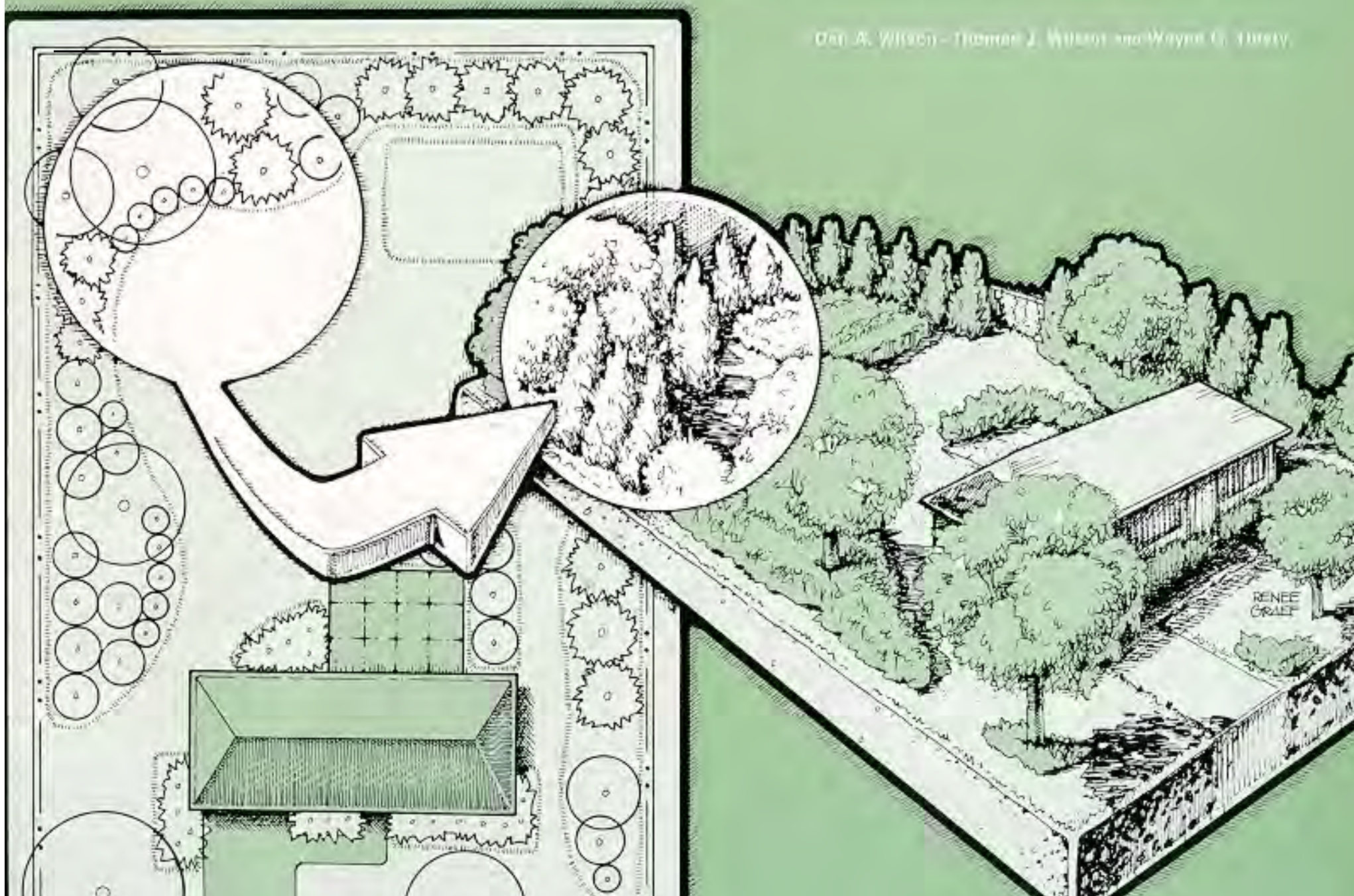


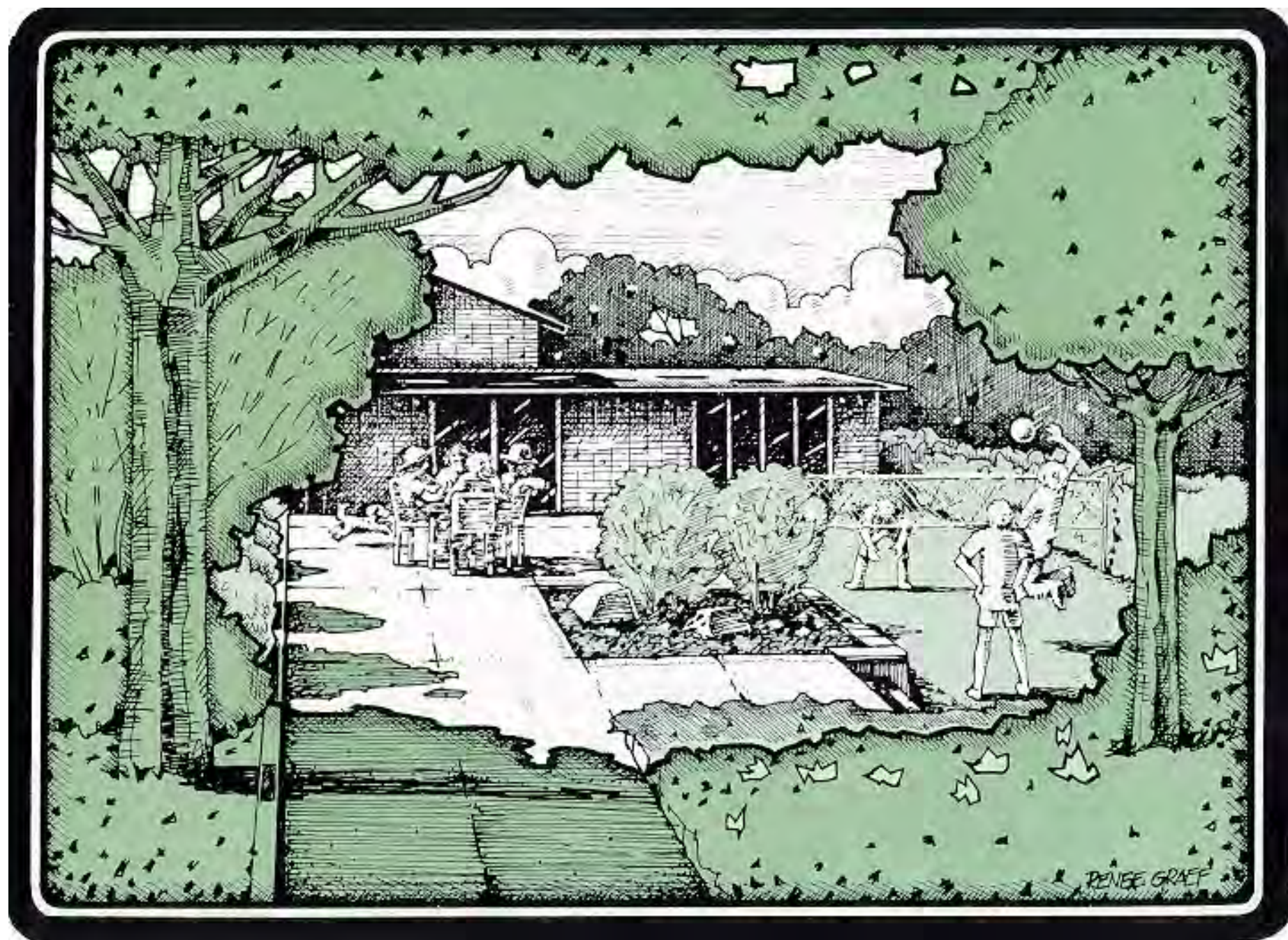
Planning and Designing Your Home Landscape

Don A. Wilson - Thomas J. Wilson and Wayne C. Jurek



Contents

Introduction, 1
Landscape Style Options, 2
Landscape Planning, 3
Landscape Design Principles, 11
Selecting Landscape Plants, 15
Landscape Structures, 21
Low-Maintenance Landscapes, 25
Finishing Your Landscape Design, 26
For Further Reading, 31
For Assistance, 32



Introduction

The area around your home is an important part of your living environment. Attractively and functionally landscaped, it can add to your enjoyment of your home. Landscaping can also increase property value, invite wildlife into your yard and conserve energy.

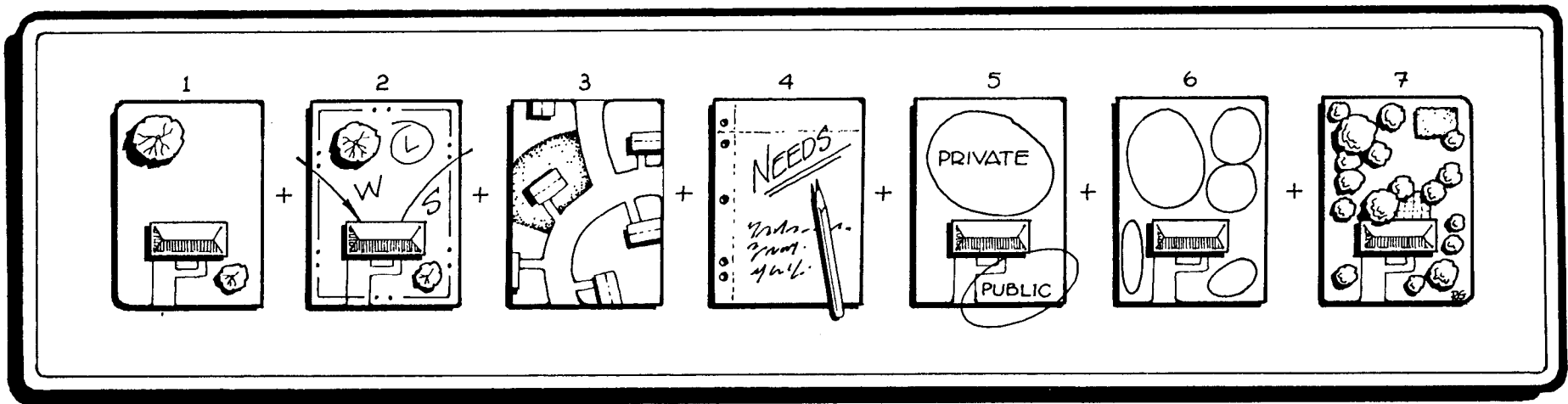
Successful landscaping does not just happen. It requires careful planning and some knowledge of landscape design. You have to consider your home's architectural

features, neighborhood landscape character, the effects you want to create, and how you want to use your outdoor living space. It may take several years of planting and construction to achieve your goals, but the first step is planning and designing what you want to end up with.

This publication will guide you step-by-step through planning and designing a landscape appropriate for you and your home. It was written with only slightly landscaped

or unlandscaped homes in mind. We emphasize "conventional" landscape design, which usually includes flowers, shrubs, trees and structures arranged in various patterns.

You can get many other landscaping ideas from books, magazines and other publications. Some homeowners may prefer to have a professional landscape architect or landscape nurseryman develop a landscape design.



Landscape Style Options

In the past, most home landscapes were either formal or informal. Formal designs are geometric and symmetrical, with plants and landscape structures precisely spaced and arranged. Informal designs make use of more natural-appearing, irregularly placed plants and structures.

Today, more people want their home landscape to meet physical and social needs. Partly as a result of the environmental movement, which fostered a greater appreciation for nature, we tend to be more interested in informal or naturalistic designs.

The geometric forms of buildings and natural landscape characteristics both suggest design patterns. As a result, a home landscape that blends geometric and naturalistic patterns is often successful. Today's landscape styles can be divided into categories in which varying proportions of geometric and naturalistic patterns are combined:

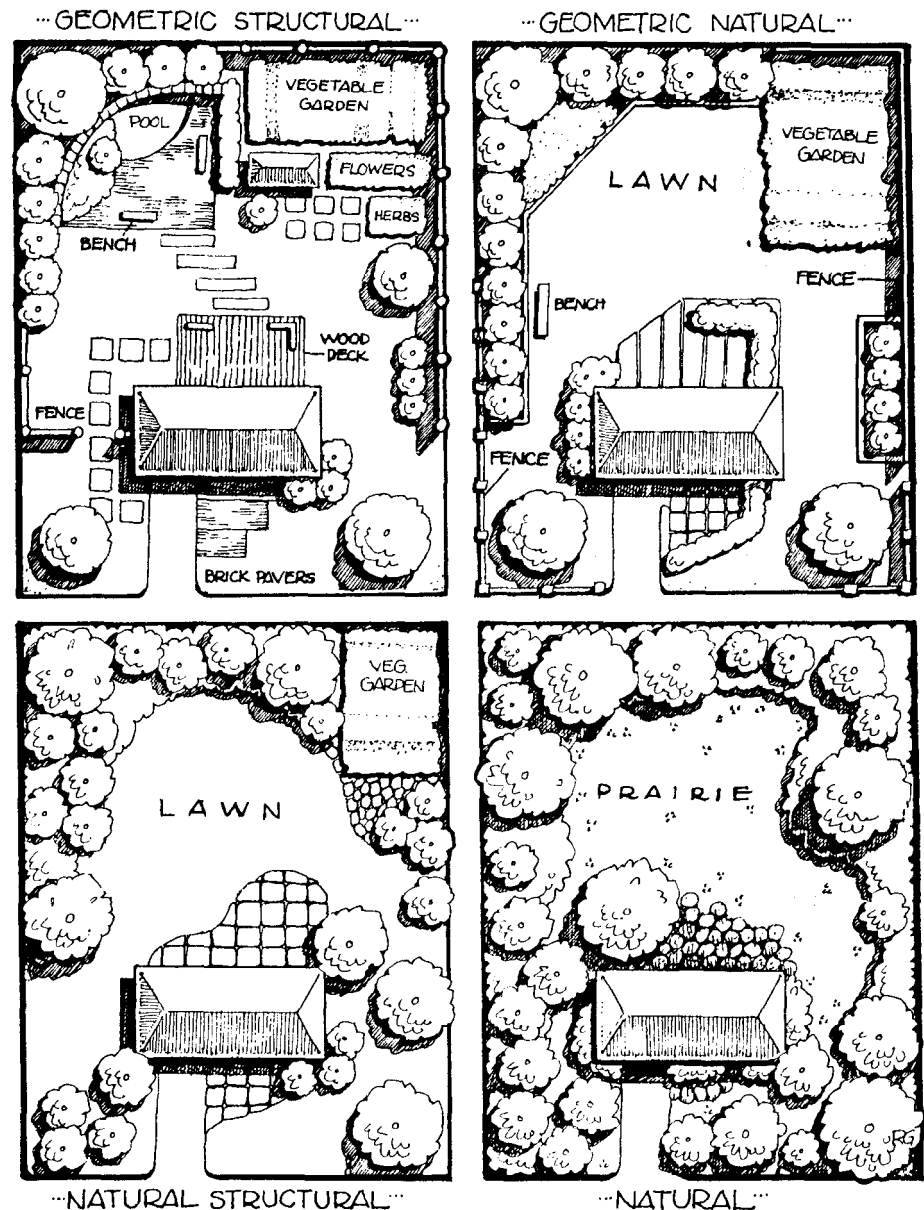
Geometric-Structural – geometric structure is primary and plants play a minor role.

Geometric-Natural – structure dominates, but plants and other natural elements play an important, perhaps nearly equal role.

Natural-Structural – plants, rocks, water and earth forms dominate, but there is a clear sense of geometric arrangement.

Natural – natural elements and materials dominate and there is no obvious human-determined form or structure.

As you go through the planning and design steps that follow, you should have in mind which of these general design styles you want to achieve.

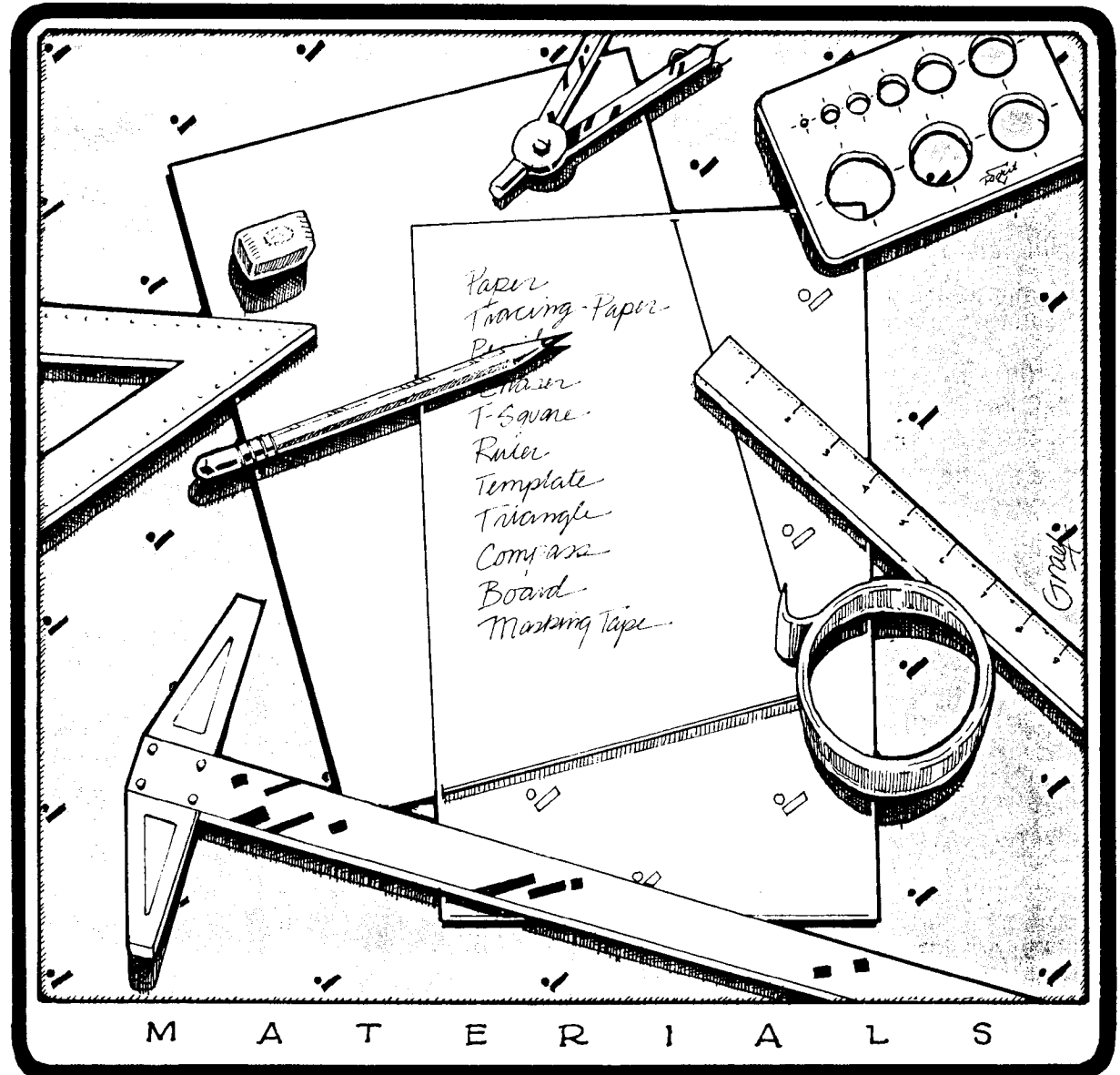


Landscape Planning

Too often, homeowners plant before they plan. Careful planning will help you avoid errors that may interfere with your final landscape design, such as improper plant selection or placement.

This section takes you through the required planning steps. You will find these items helpful:

- Large white paper or 1/10 or 1/8 inch graph paper (graph paper is easier to use)
- Solid table or board to draw on
- Masking tape to hold paper in place
- Ruler or scale marked in eighths or tenths of an inch
- Lead pencil
- Eraser
- Lightweight, "see-through" tracing paper
- T-square, triangle, circle template and compass



Step 1. Draw a Base Map

If you own a new home, you probably have a lot or plot plan that shows your home in relation to the property boundaries. If you do not have such a plan to work from, you'll need to determine accurately – with a tape measure – where the house is located on the lot. In addition, determine:

- Outside house dimensions
- Overhang dimensions
- Window and door locations
- Height from ground to bottom of windows
- Locations of water faucets, dryer vent, air conditioner, window wells, downspouts, electric and gas meters and fuel fill spout.
- Any other important exterior house features

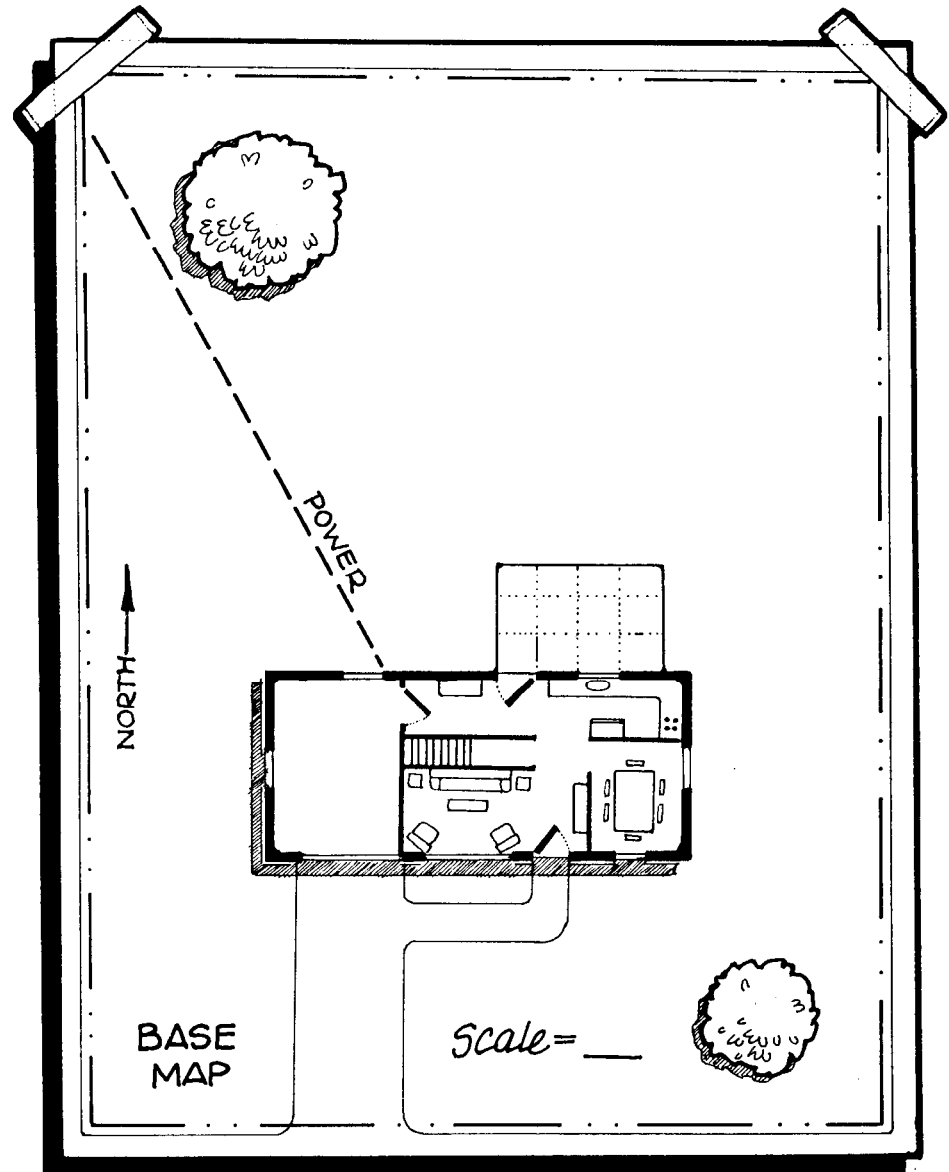
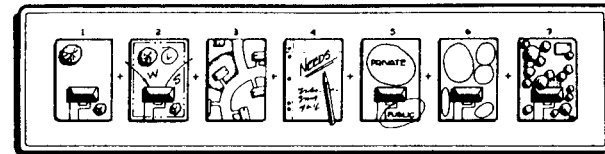
Draw your lot lines on the paper. If you live on a large parcel of land, limit your base map to the area you plan to landscape. It's usually most convenient to draw at a scale of 1/8 or 1/10 inch per foot—1/8 inch or 1/10 inch on the paper equals 1 foot on the ground. In one corner of the paper, indicate which direction is north and the scale of your drawing.

Next, draw the location of your house, using the same scale. Indicate windows, doors, overhang and other exterior features. You'll need this information later to develop a successful planting design. Also sketch in interior room arrangements; this part of the drawing will help you consider views from inside the house and patterns of movement between yard and house.

Still using the same scale, draw in existing lot or yard features, including:

- Garage, if unattached
- Other buildings in the area to be landscaped (such as barn, silo and storage shed)
- Driveways and sidewalks
- Underground and overhead utility lines: electric, telephone, water and gas
- Septic tank (or drywell), drain field and vent or sanitary sewer lines
- Trees, shrubs, and other plants to be preserved (don't bother noting those you plan to remove)

1.



Step 2. Analyze your lot or farmstead

To develop the best design, you need a physical and visual analysis of your lot or farmstead that takes into account both natural and man-made features.

Inventory the following categories of natural features on your lot:

Vegetation. Your homesite may already have trees, shrubs or other plants. Before deciding whether to include them in your landscape design, you must know what kind of plants they are – some may be considered “weeds,” while others may be valuable. Consider also the general appearance or quality of the plants, whether they interfere with the rest of your landscape design, and the shade and sun patterns they create.

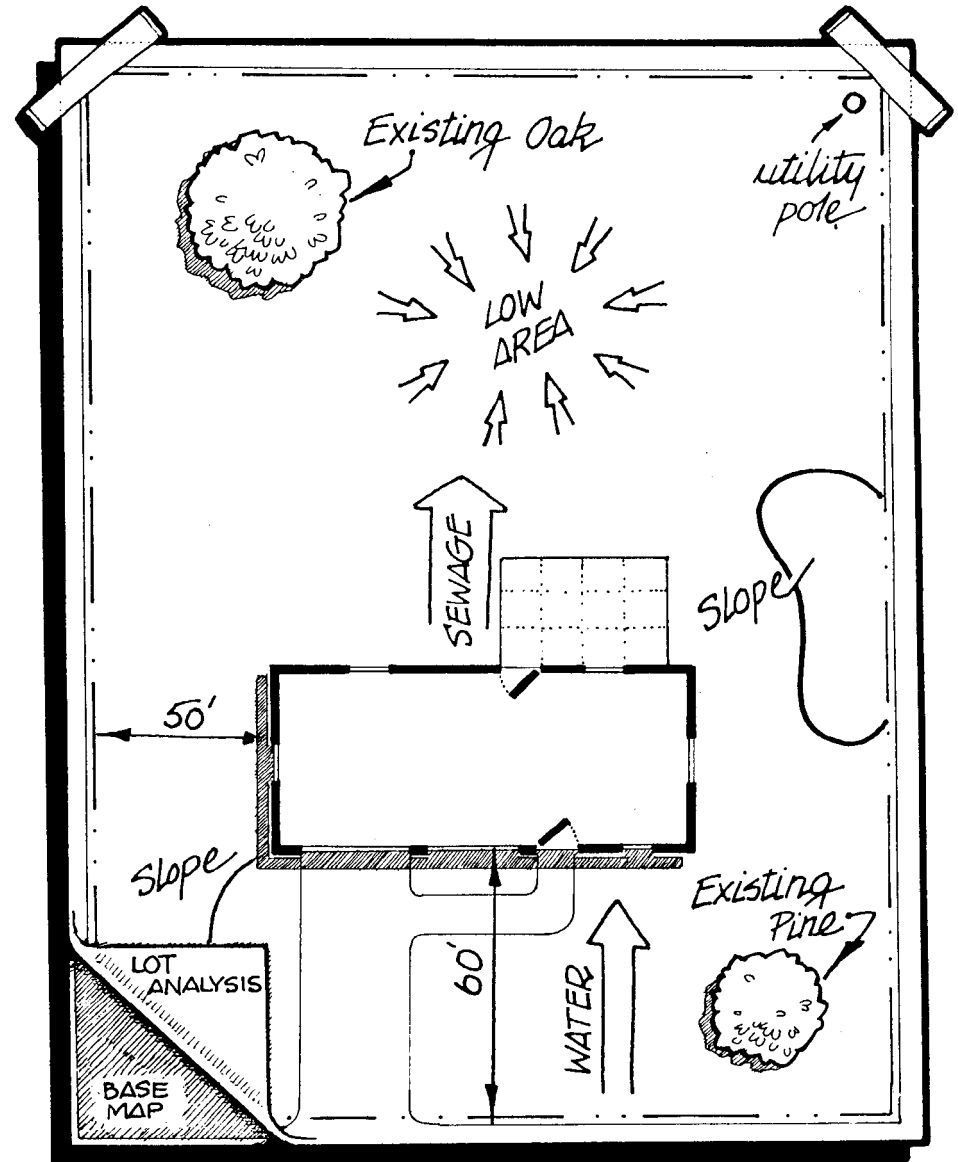
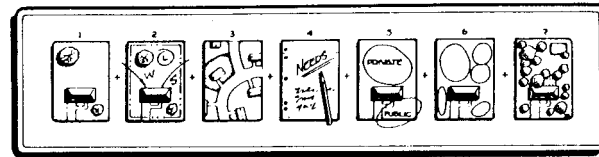
Topography refers to the shape of the land's surface. Some lots are flat, while others have a variety of ground forms. It's important to decide whether the existing topography can be preserved or whether it must be modified to meet your family's outdoor needs.

The **drainage** patterns on your site may greatly influence your home landscape design. Note the direction of runoff and low spots where water may collect. Monitor drainage carefully to make sure that outdoor use areas will be suitably located, that water will move away from buildings and that plants will grow well where you place them.

Your lot or farmstead's **soil** is important because it must support both plants and man-made structures. Soil tests, available through your county Extension office, will tell you whether your soil has the proper chemical makeup for good plant growth. Your county Soil Conservation Service can determine whether the physical properties of your soil are suitable for landscape structures.

Climate will influence your landscaping plans in several ways. Winter temperatures determine which plants are hardy enough to grow on your lot. Spring and fall frost dates determine length of growing season. Average precipitation (about 30 inches for most of Wisconsin) may not be enough for some plants; but you can supply additional water. Humidity affects the spread and severity of plant diseases. In Wisconsin, prevailing winter winds are from the northwest, and most summer breezes come from the southwest. You will want to provide winter wind protection and to take advantage of summer breezes. The U.S. Weather Bureau and county Soil Conservation Service and Extension offices can provide climate information more specific for your location.

2.



During your analysis, take into account man-made structures and natural landforms seen from your house and lot. You will probably want to screen from view such off-site “nuisances” as highways, power lines, industrial centers and junkyards while keeping or enhancing good views. You may also want to block out annoying noises from automobiles, trains and other sources.

It helps to take pictures of your lot or farmstead. Often we see only what the mind “wants” to see, rather than what really exists. Photographs or slides help you see the site as a visitor would. They also serve as reminders of what the house and site look like while you are working on your design.

Photos should include views of the house from all sides. Photos of off-lot views, from both inside and outside the house, will help you identify those you want to keep or enhance and those that should be screened for beauty or privacy.

Record lot features by sketching them on tracing paper placed over your base map. On the tracing paper, indicate with arrows or other symbols:

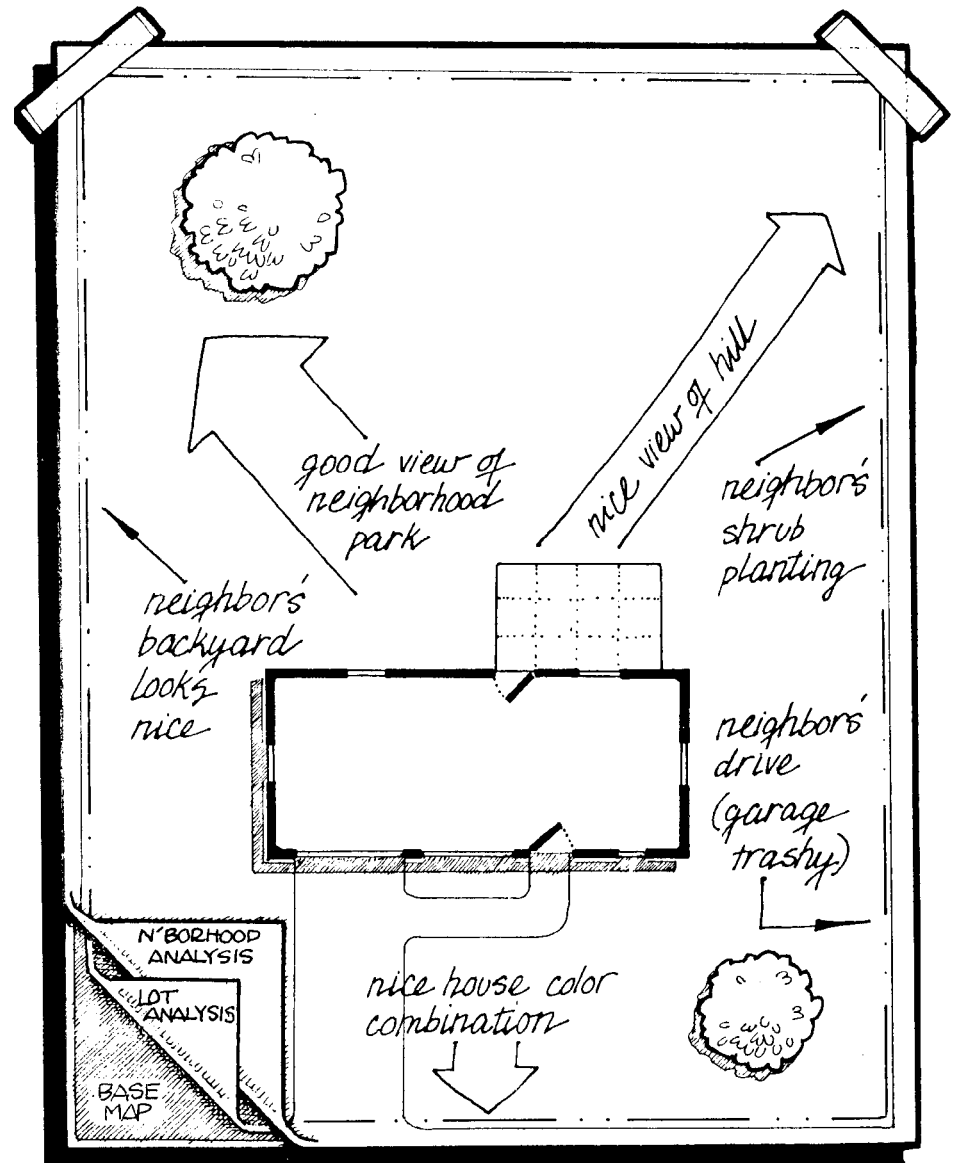
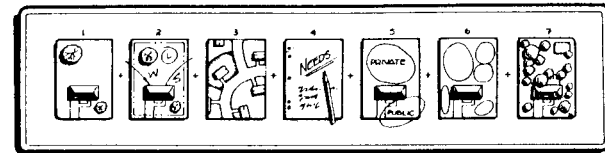
- Major differences in land surface elevation – include hills, depressions and rock outcroppings
- Topography and drainage patterns
- Prevailing summer and winter winds
- Good views to be kept or enhanced.
- Poor views and annoying sounds to be screened
- Other features that seem significant

Step 3. Analyze how your Lot or Farmstead Relates to the Neighborhood

A survey of your neighborhood will suggest landscape possibilities. It will also help you avoid developing a design that is out of place.

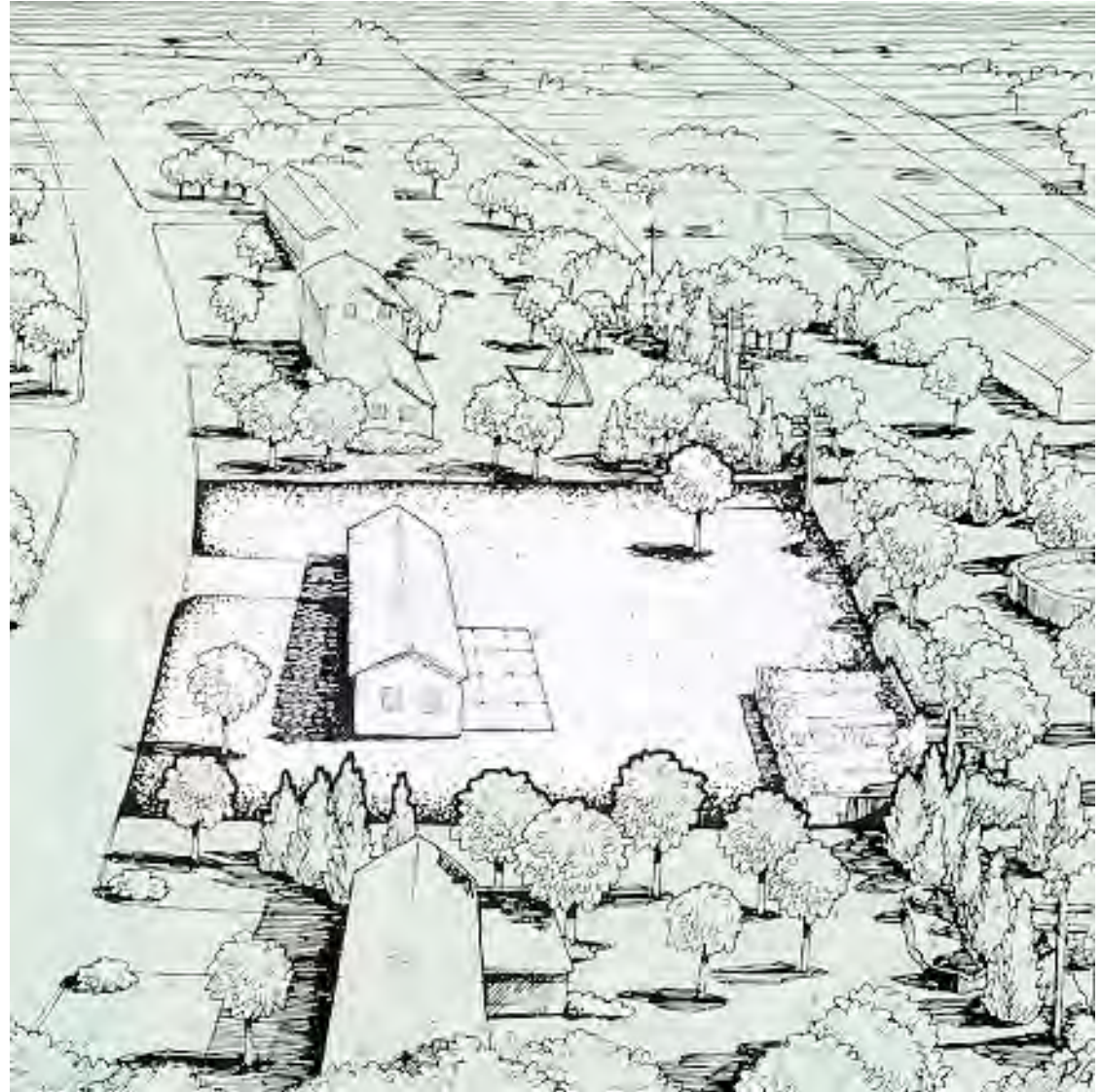
Don't be limited by neighborhood examples, but if you do decide to use a very different kind of design, do it unobtrusively-you may want to restrict its full impact to the back yard, for example. You may also want to share your plans with neighbors to gain their understanding and to get their suggestions.

3.



What building materials, colors, plants and types of screening have others used? Which home landscape in the neighborhood do you like or dislike? Earth-tone home colors, dark roofing materials, organic mulches and uniformly green foliage usually create a visually pleasing neighborhood.

Some communities have zoning, building setback and fencing and planting restrictions you should know about before making landscaping plans. Check with your town, village or city clerk or zoning administrator. You should also check deed and subdivision restrictions for other possible landscaping constraints.



Step 4. Analyze your Needs

Now is the time to stop and think about how you want to use the space you plan to landscape. Do you want an outdoor living area? What will you use it for? Eating, cooking, sunbathing? A patio, deck or grassed area would be appropriate for these and other uses. Do you want a vegetable or fruit garden, outdoor play area, kennel, sports area or flower bed? You need to list all your activities and space requirements.

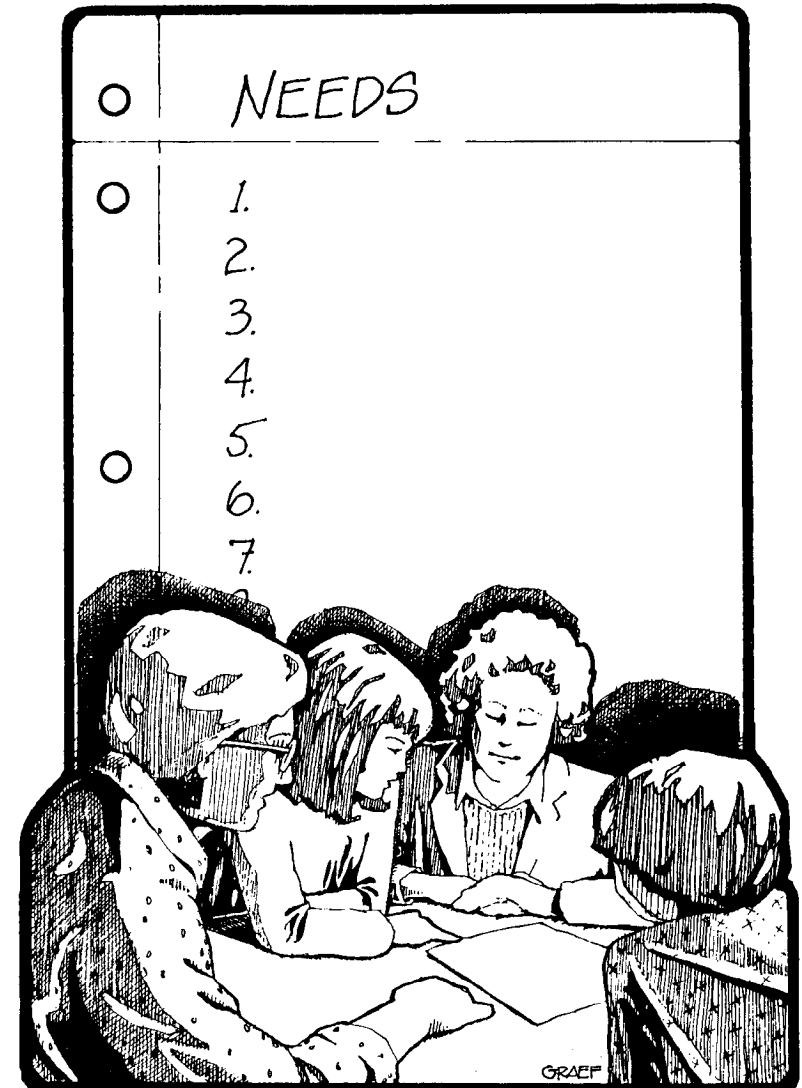
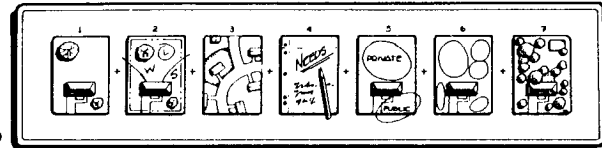
Do you want to attract birds and other wildlife? If so, plan to use lots of trees and shrubs, including fruiting ones, in your landscape design.

Do you want a low-maintenance landscape? If so, consider having a small lawn, placing trees, shrubs and ground covers in mulched planting beds and using plants that are well-adapted to your site conditions. Improperly designed plantings often require a lot of maintenance. Low-maintenance landscapes are discussed in more detail in another section of this publication.

If you plan any substantial landscape changes in the future – adding a swimming pool, tennis court or greenhouse, for example – reserve space now so you won't have to move plants or structures later.

Consider how much you can afford to spend on home landscaping. Many landscape architects and landscape nurserymen recommend investing about 10% of a house's value on the landscaping around it, although an acceptable landscape can be accomplished for much less. Once you've completed your plan, planting and construction can be spread over many years. To reduce costs, you can buy small plants and get do-it-yourself construction plans for patios, walks, decks and other structures. Even though your budget may limit your landscaping activities now, consider everything you want to accomplish eventually in your present landscape planning.

4.



Step 5. Plan Outdoor “Use” Areas

The location and design of outdoor use areas will depend on family needs and preferences. The particular uses planned and amount of space available will determine use area size. Consider relationships between indoor and outdoor activities. You'll want to keep areas near bedrooms quiet, while locating noisy outside areas near the kitchen, or perhaps away from the house if space permits.

Two general areas should be part of any home landscape design – public and private areas.

The **public** area usually includes the front yard, driveway, sidewalks and entrance to the house. On a corner lot, the public area may also extend into the side or backyard areas.

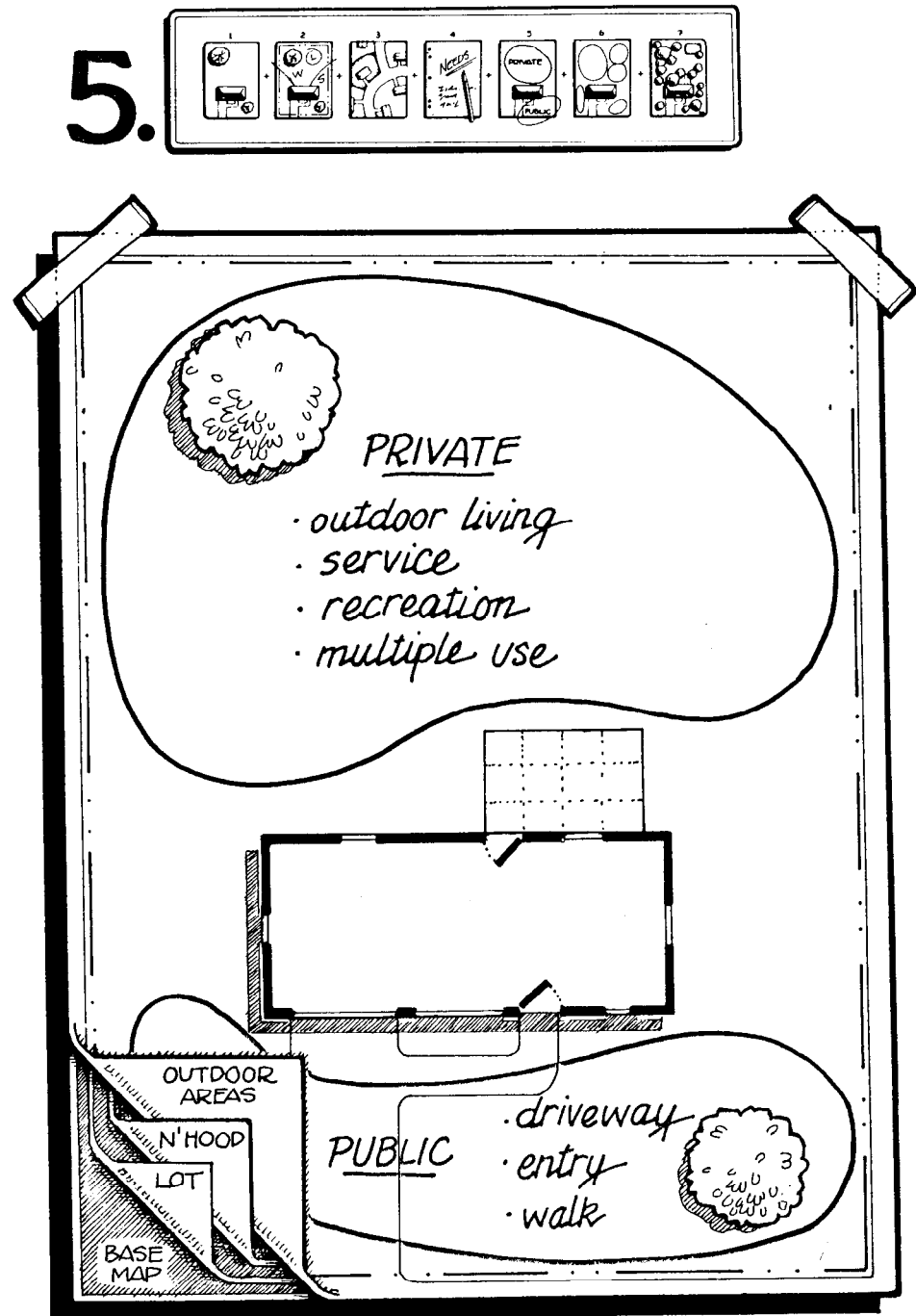
The entrance and front yard are the most public parts of most peoples' yards. You can design the entire front yard for public viewing or – because of small lot size or a need for privacy – enclose parts of it with plants, fencing or both. Remember that your entrance and front yard contribute to overall neighborhood appearance – trees, shrubs, flowers, lawns, fences and other landscape structures should fit in with the neighborhood's character.

Driveways and sidewalks link your home to neighborhood streets. Consider safety, topography and lot character when locating them. Keep grades as gentle as possible and make as few road cuts as possible. Remember the need for snow removal and landscape maintenance. Keep in mind how you want visitors to move from your parking area to the main entrance.

The **private** area of your yard or lot consists of living, service, recreation and multiple-use areas, depending on the needs you identified earlier.

An outdoor living area may include such features as terrace, deck, patio, screened porch and grassed areas for outdoor cooking, sunbathing, entertaining and just relaxing. Try to estimate the number of people who might use the area at one time so you can design it accordingly.

Many homeowners like to have a service area for such things as vegetable and fruit gardens and wood and garbage storage. Choose these areas carefully. Vegetable gardens and many flowers need full sunlight and suitable soil. Wood and garbage storage areas should be accessible, but out of view.



You may want outdoor recreation areas for lawn games, swimming pool, tennis court, greenhouse or other purposes. Lot size, family needs and finances will determine how much space you can devote to outdoor recreation.

In many yards, space is limited. You may need to use the same area for several activities. Multiple-use areas may serve as living, recreation, and service areas at appropriate times.

Step 6. Make Use Area Sketches

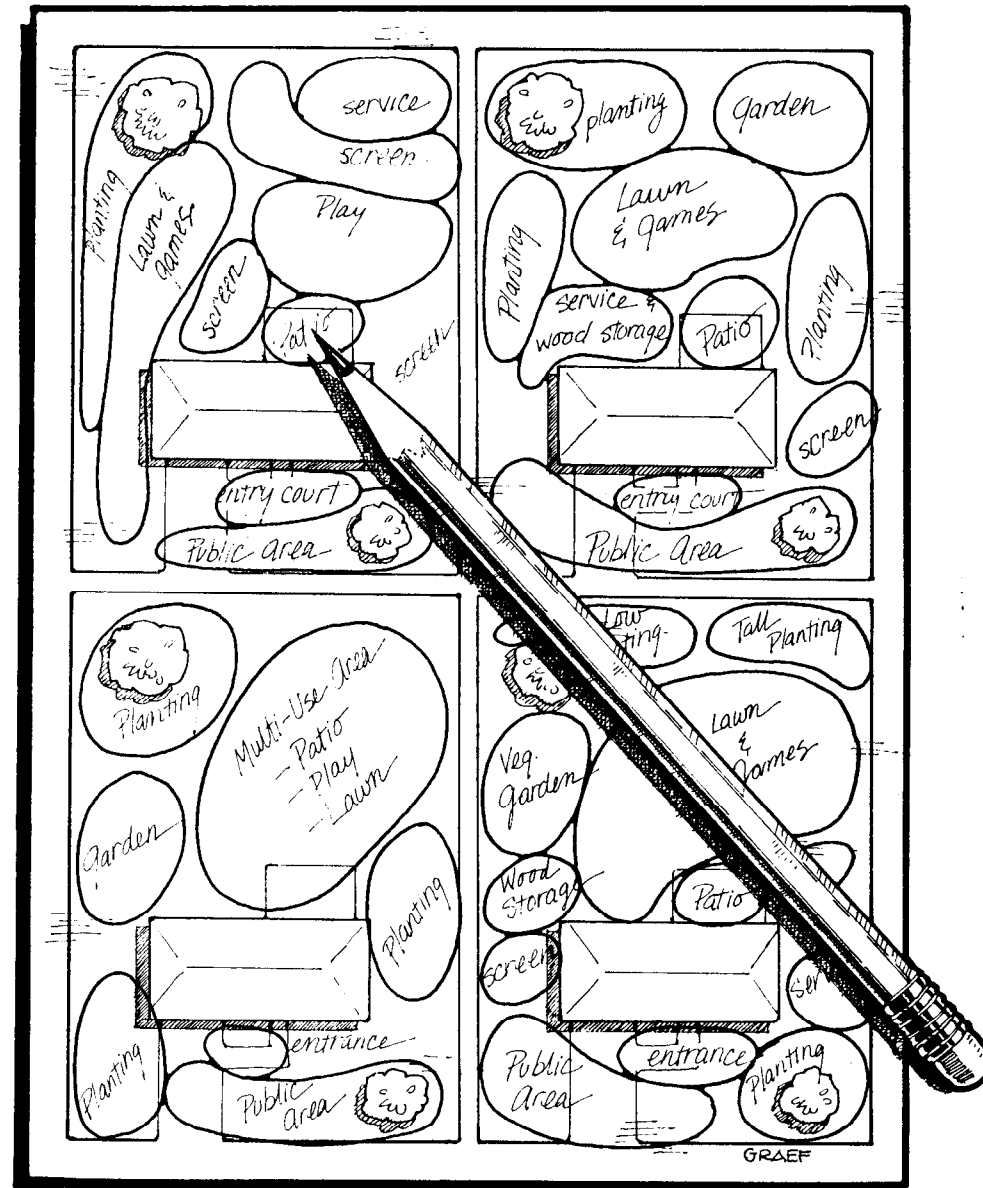
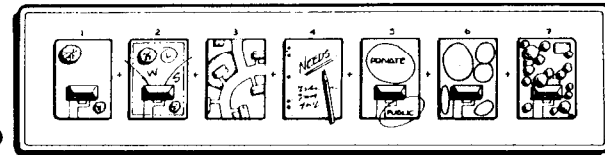
Now, after the necessary analyses (Steps 1-5), it's back to the drawing board! With tracing paper on top of your base and lot analysis maps, make a number of alternative general use sketches, fitting the use areas together in ways that take into account site features and family needs. Use circles, ovals and rectangles to locate specific spaces within your public and private areas. Keep the sketches that seem to suit your lot and family needs. Discard those that do not.

While making your sketches, consider these questions: Does the existing vegetation that you wanted to keep still fit into your plans? Is the slope of your property appropriate for your proposed outdoor use areas? Do your use areas make the most effective use of sunlight? After answering these questions, you may want to discard some use area arrangements and consider alternatives.

Grassed or hard-surfaced travel routes must be planned to provide convenient movement between different use areas. Indicate these routes with arrows on your plans.

So far, you have been collecting and combining information about your homesite and your needs. To give specific shape to the general use areas and to complete your landscape design (Step 7) you will need some understanding of design and composition principles. The next two sections give an overview of these principles.

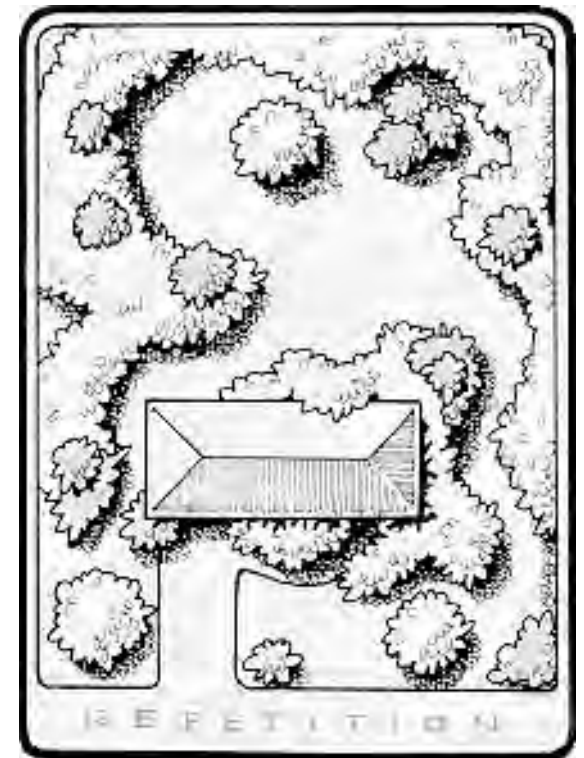
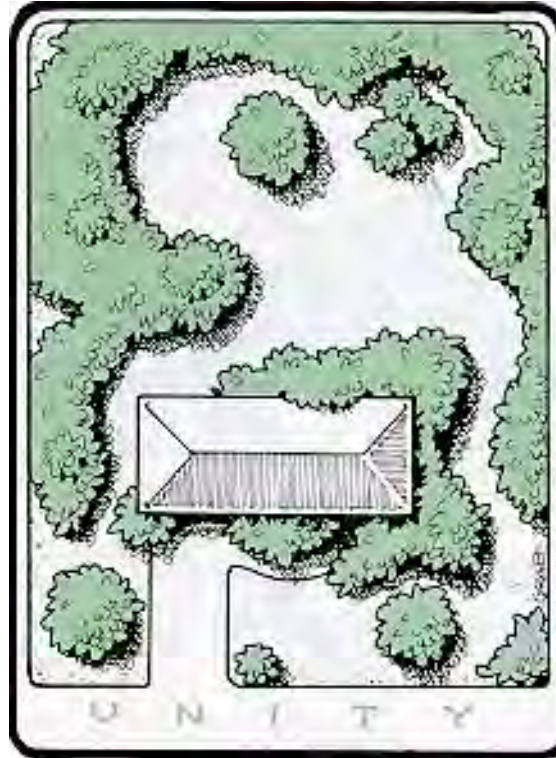
6.



Landscape Design Principles

Home landscape designs vary according to family needs and preferences, but successful designs have certain underlying principles in common.

A landscape has **unity** when its predominant features have some visual characteristics in common. For example, plants with similar forms, colors and textures can create unity, both on your lot and in your neighborhood. This is also true of lawns and paving materials. Repeating a design pattern, color or texture in several different locations helps create unity.

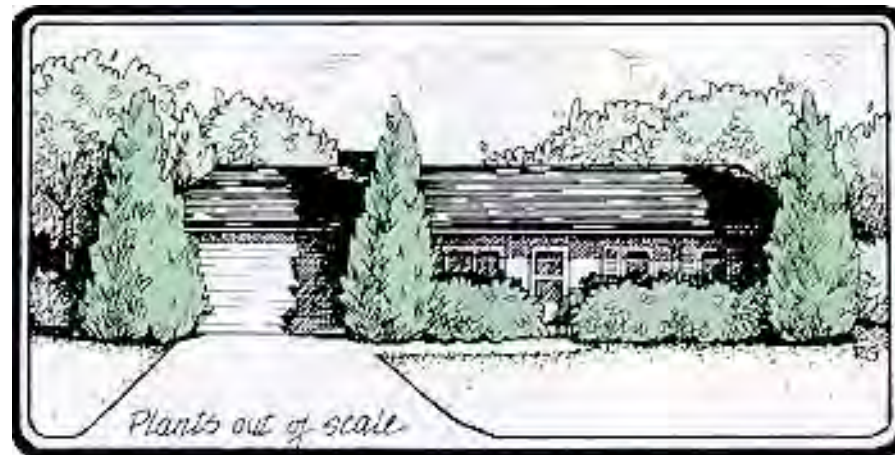
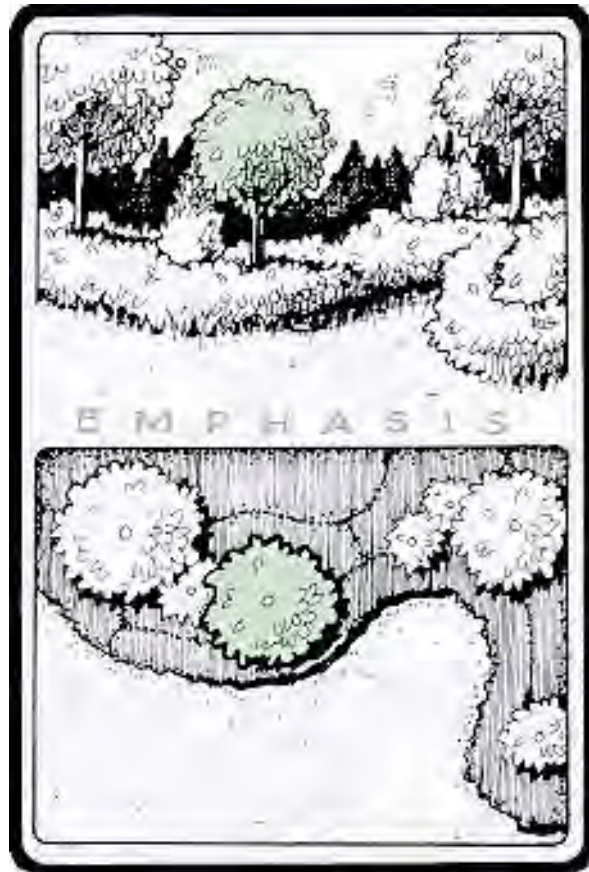


Plants and landscape structures of similar visual importance help create **balance** in a landscape design. With color, form, texture, size and other features, you can direct attention to several areas of the yard. Balance may be symmetrical ("formal"), in which each side of the yard is similar in pattern, or asymmetrical ("informal"), in which each side attracts the same attention even though objects and spacing are not repeated.

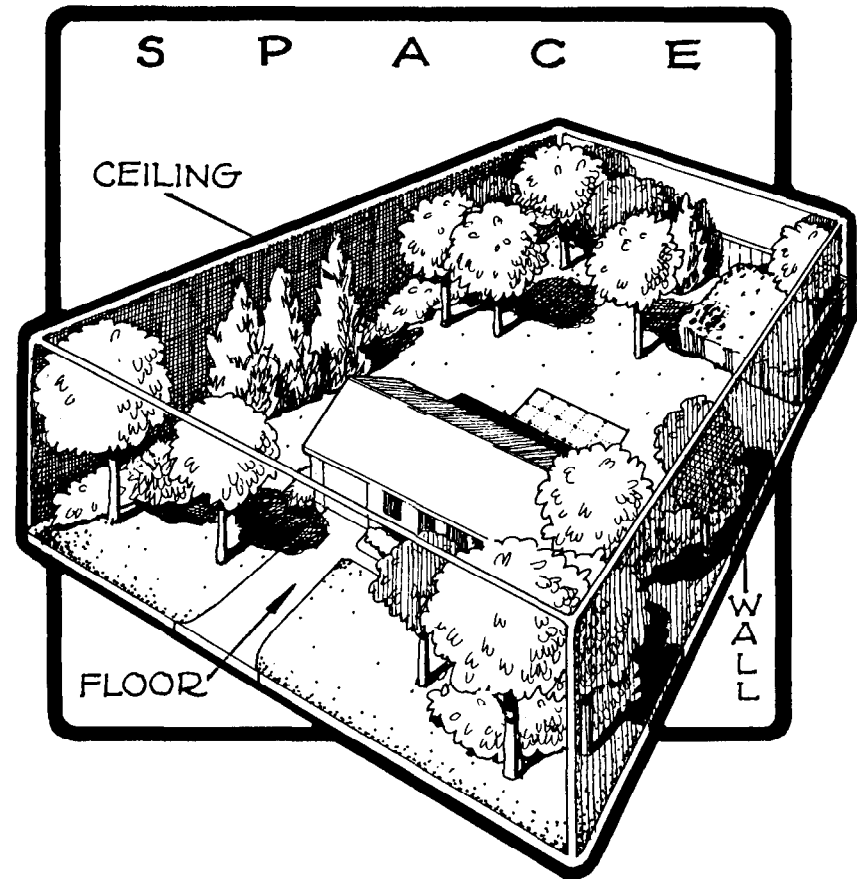
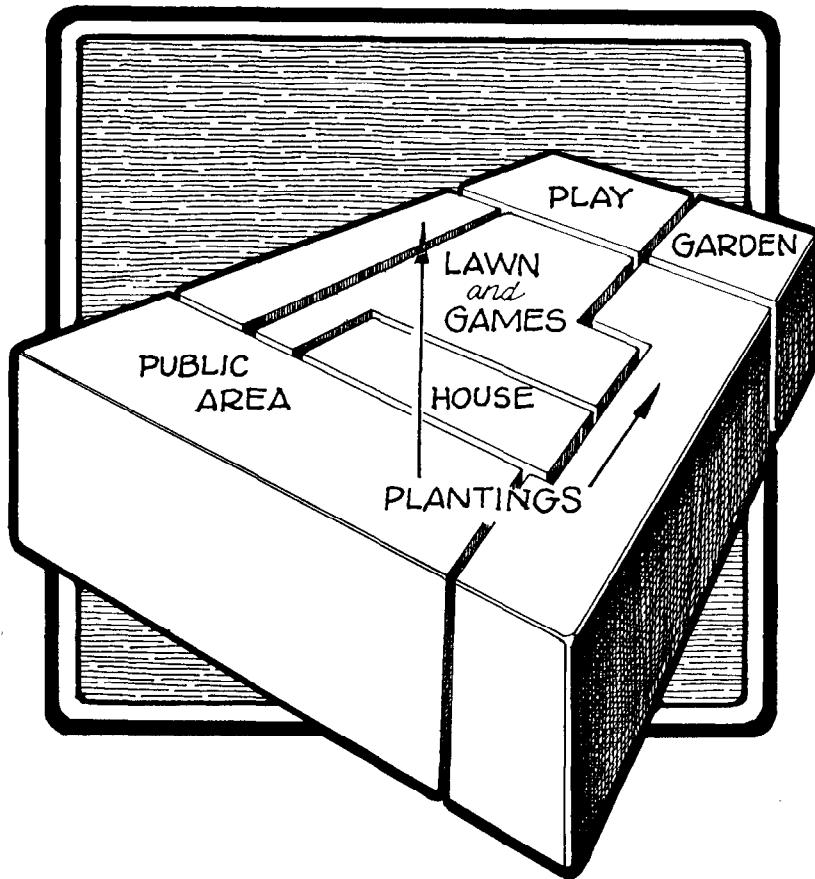


Accent areas or focal points to which attention is drawn create **emphasis** and keep a design's unity and balance from becoming monotonous. A single contrast in color, texture, form or height – such as provided by a bench, tree, pool, or flower bed – can provide emphasis.

Scale refers to the size relationships among plants, structures and open spaces. A 4-foot-high shrub with a 4-foot spread may be too large – and therefore out of scale – in front of low windows. Next to a high-rise building, however, the same shrub would be out of scale because it is too small. In some home landscape situations, group plantings will compensate for plants with too-little spread.



Space. Your entire lot can be considered a block of space with dimensions of length, width and height. Plants, fences and buildings are used to divide the lot into smaller living spaces analogous to the rooms of your house. These outdoor “rooms” should have separate identities and should meet your use area needs. The “rooms” should have openings that direct movement from one to another.

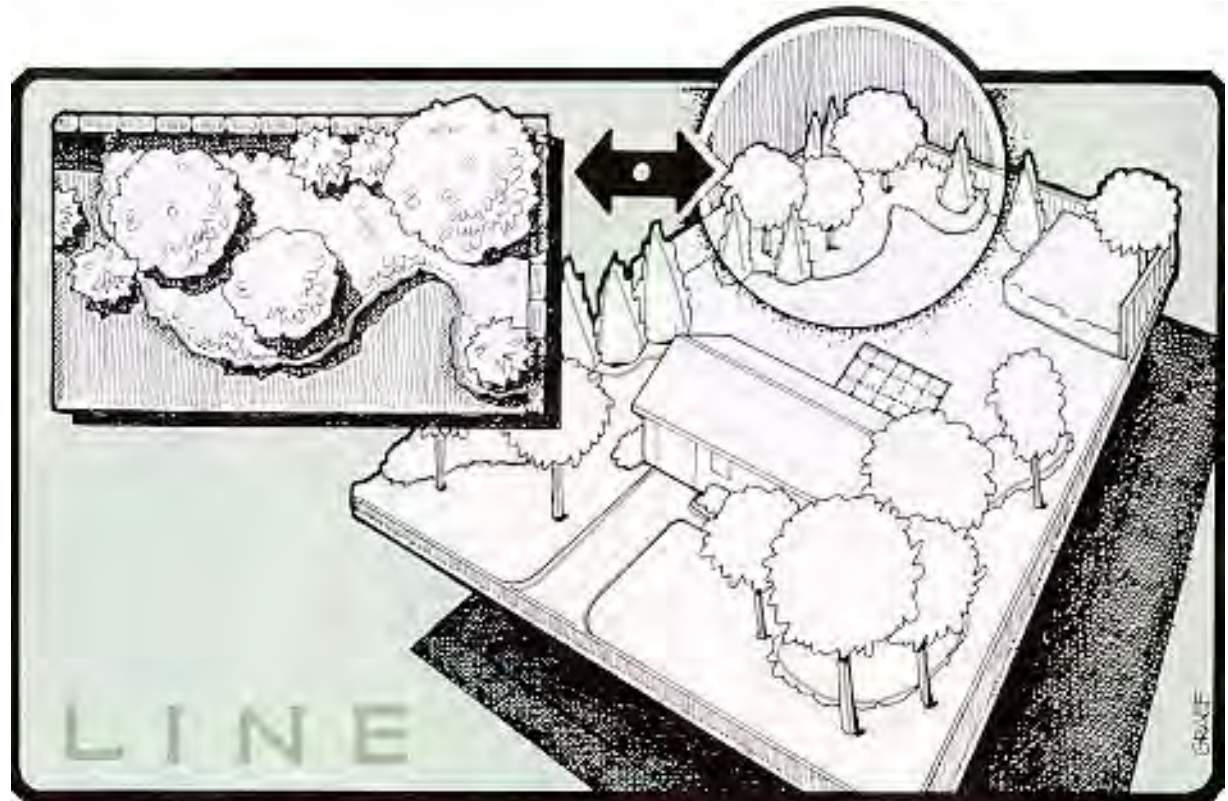


Lines may be straight or curved. Landscape designers frequently lay out patios, decks and planting beds using straight lines that extend – or parallel – house and lot lines. Equally successful – and more naturalistic – designs can be created with curved lines. Straight and curved lines can be combined in a design, but it is difficult for the beginning designer to do this successfully.

These design principles will help you give specific shapes to the areas you identified in your general use sketches. But you can't design a landscape based only on placement and size of plants and structures – the main components of home landscape. You must also select the appropriate plants and construction materials.

In other words, from design principles you may arrive at the proper location and shape for a planting bed. But you must also decide what plants to put in the bed. In the same way, you have to decide what to surface a patio with as well as where and how big the patio should be.

Both plants and building materials can be selected for their form, texture and color. You will need to keep these elements of landscape composition in mind as you proceed toward your final landscape design. We discuss them further in later sections of this publication.



Selecting Landscape Plants

There are three things to consider in selecting plants. They are, in the order you should consider them: plant hardiness, site conditions and suitability for your landscape design.

Wisconsin is divided into hardiness zones based on lowest winter temperatures. Many plants cannot survive Wisconsin winters.

All plants require a certain set of growing conditions. The conditions your site offers will determine what plants will grow well there.

Soils vary greatly in acidity, drainage, and fertility. Sandy soils are usually well drained, while clay soils may become water logged. Few plants do well in both situations. Use the soil information from your lot or farmstead analysis in selecting plants. It's better to select plants for your soil than to try to change the soil.

Plants vary in their **sunlight** requirements. For example, the Japanese yew does well in shade, but junipers need full sunlight to grow well and look their best. As you evaluate alternative landscape designs, consider shade patterns created by buildings and existing plants.

Some evergreen trees and shrubs will not tolerate the drying effect of winter winds. On the other hand, most hardy deciduous plants (those that drop their leaves in fall) will tolerate full exposure.

Topography. Some plants have adapted to cooler northern slopes, while others do better with hot, dry, south-facing exposure.

Be aware of possible air and soil **pollution** when selecting plants. De-icing salt damages many plants, either as a soil contaminant or as a spray created by traffic or snow plowing. Pollutants from industries and automobiles, such as sulfur dioxide, ozone and fluoride, also damage plants.

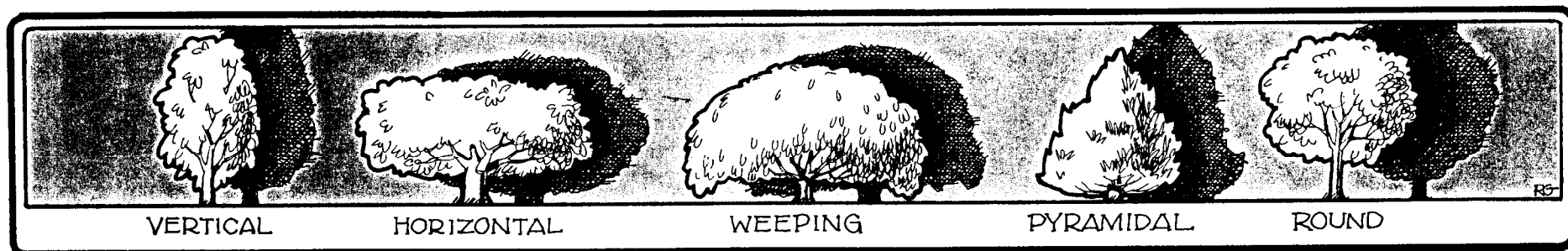
You must select plants that will grow well under your conditions or you'll have trouble keeping them healthy from the outset.

Extension publications A2865, "A Guide to Selecting Landscape Plants in Wisconsin," and A2970, "Salt Injury to Landscape Plants," contain more information on these subjects.

Design considerations

Plants have different **forms**, or growth habits. Basic forms and their common uses are:

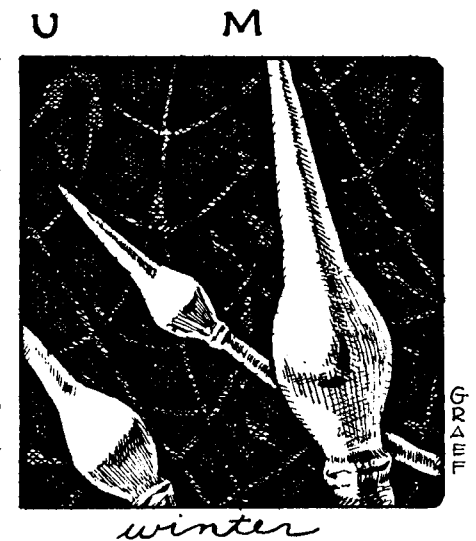
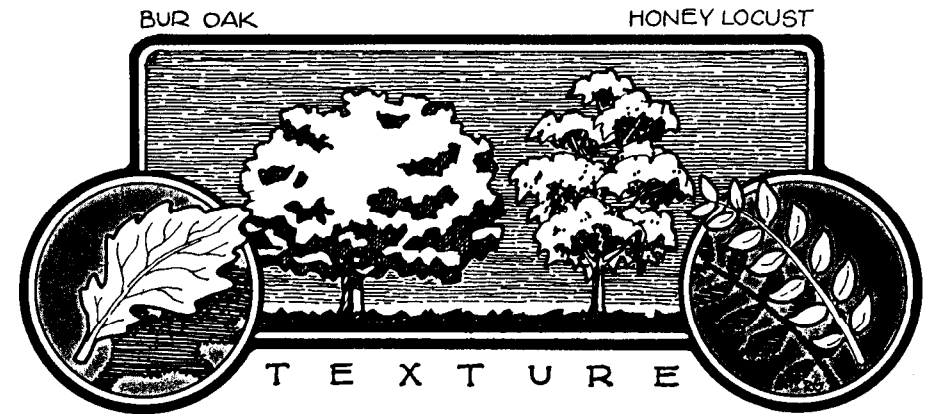
- vertical – usually used sparingly as accents or to provide height
- horizontal – used to provide width and to "attach" structures to the ground
- weeping – usually used only as accents
- pyramidal – used as accents or combined with rounded and horizontal plants
- rounded – used to create large masses, borders or enclosures



The size of a plant's leaves, twigs and branches determines its **texture**. Fine-textured plants have small leaves and twigs, coarse-textured ones have large, and medium-textured ones in between. You may want to select plants of all three textures. Often, the size of a landscape space will determine what texture is appropriate – a small space will seem larger with fine-textured plants than with coarse-textured ones, for example.

The dominance of one **color** helps provide harmony in a home landscape as well as throughout an entire neighborhood. For most people, green foliage creates a restful landscape. But you may want to select plants with particular fruit, bark and fall leaf colors to serve as accents as the seasons change.

You may want to consider using some native plants in your design. Plants native to Wisconsin are just as beautiful as non-native ones and are often better adapted to our growing conditions. Honeysuckle, buckthorn and other ornamentals that have escaped to the wild have actually forced some native plants from natural plant communities. Certain varieties of buckthorn are disease carriers for a rust that affects oats.



Trees

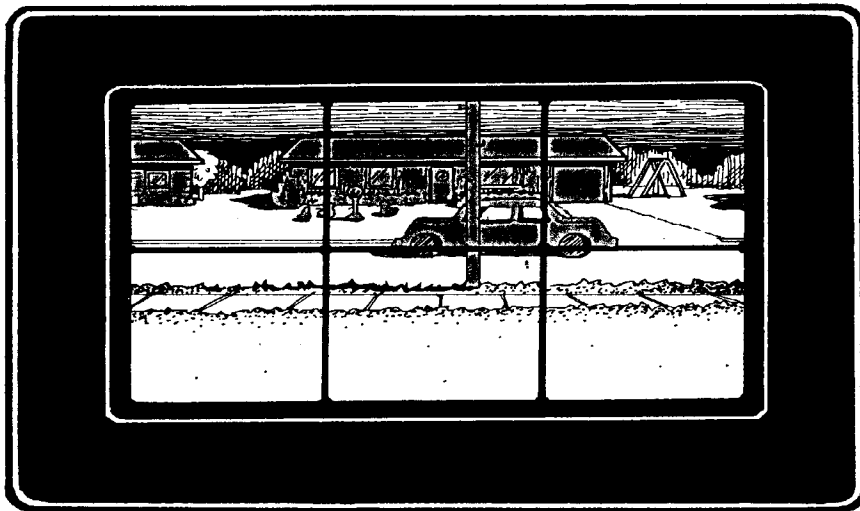
Trees – both deciduous and evergreen – help put a house and its surrounding into proper scale. They should be planted where they will enhance the overall appearance of your home's setting as well as provide shade in summer and wind protection in winter. Frequently, trees are used to frame a good view or screen a poor one.

A variety of small to medium-sized trees may be used as accent plants. You can base your choice on a combination of visual characteristics, including foliage and flower color, fruit, bark, fragrance and texture. Fruit trees may be used as accent plants, but remember that they can be messy and require regular spraying for insect and disease control.

Consider planting several kinds of trees to minimize the risks of insects and diseases. But don't overdo it – too many kinds of trees may deprive your landscape of unity. A compromise – planting several representatives of several different types – will provide both a measure of insect and disease resistance and design unity.

Plant individual shade trees 30-40 feet apart. Or, for a more natural, forest-like landscape, vary tree spacing from 5-50 feet. To obtain the best shade patterns and to avoid foundation damage, plant trees 15-25 feet from the house. Irregular tree placement creates an informal setting.

In urban areas, check with municipal officials before planting trees in the terrace between street and sidewalks.



Shrubs

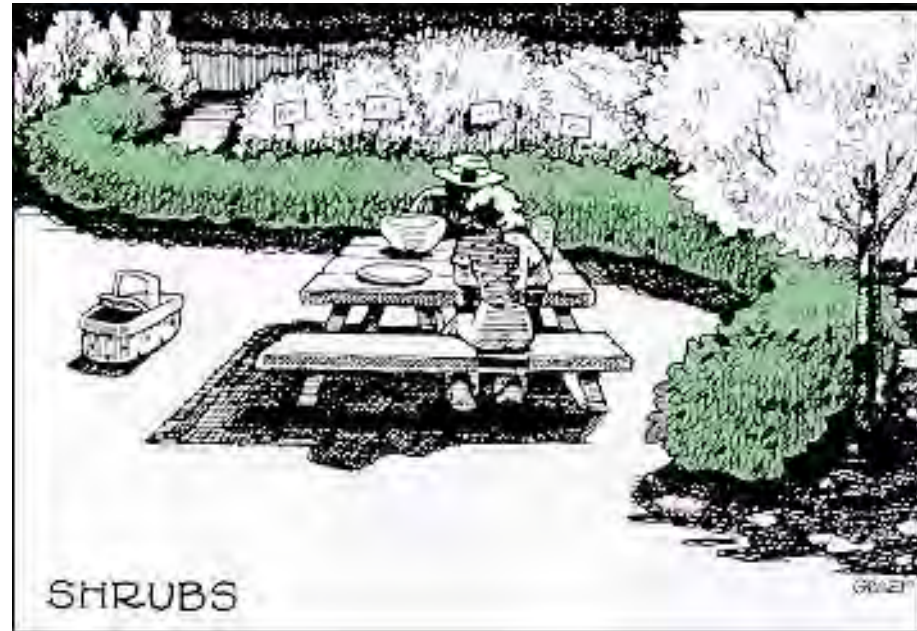
Deciduous and evergreen shrubs are an important part of most home landscapes. Planted in groups, they create screens and barriers or serve as foundation plantings or understory plants beneath trees. Although most shrubs work best in groups, they may also be used as accents – accent shrubs can help lead visitors to your entrance, for example.

Masses of shrubs effectively delineate different use areas in the yard, much as walls delineate the rooms of a house. A heavy planting of shrubs at house corners softens the transition between vertical walls and horizontal ground lines.

Foundation plantings should enhance your overall landscape design. Generally, it's not good design practice to surround a house completely with foundation plants unless you need to screen an unsightly foundation. For under windows and eaves, select foundation plants that will not be too tall when mature.

Taller plants may shade out understory plants, so select shade-tolerant shrubs for use as understory plants.

You can create seasonal variety with combination plantings of evergreen and deciduous shrubs. Remember that landscapes have a more unified appearance when green-foliaged plants predominate. Shrubs with red, purple, yellow or silver summer foliage can become unintended "focal points" and detract from your landscape design. It's better to select accent shrubs based on flower, fruit, bark and fall leaf color. You can unify your landscape by planting the same kinds of shrubs in several different locations.



Avoid planting shrubs too close together – size at maturity should determine spacing. Don't give in to the desire to achieve the mass effect of a group planting too rapidly. A mature landscape cannot be created in one growing season. It will require at least three years, perhaps five, before a group planting achieves its intended effect.

Tall shrubs are usually planted 5-7 feet apart, medium shrubs 3-5 feet apart and low shrubs 2-3 feet apart. Place shrubs slightly more than one-half their ultimate spread away from the foundation so they can attain their natural forms.

Ground Covers, Vines and Flowers

Ground covers, vines and flowers complement most home landscape designs.

Ground covers help unify tree and shrub plantings and provide a

contrast between lawn and planting beds. Mass plantings of perennial ground covers reduce landscape maintenance.

Vines soften the texture of brick and stone as well as shade house walls. They will cover chain link fences and help provide screening where space for trees and shrubs is limited.



S U M M E R



W I N T E R

Flowers add color to your yard. They can be planted in beds and borders, in front of shrub masses and to fill in open areas while shrubs are growing. Flowers look best against a simple background, such as a fence or shrub planting, so they're not recommended for the middle of a lawn. Both perennial and annual flowers require a lot of maintenance.

Lawns

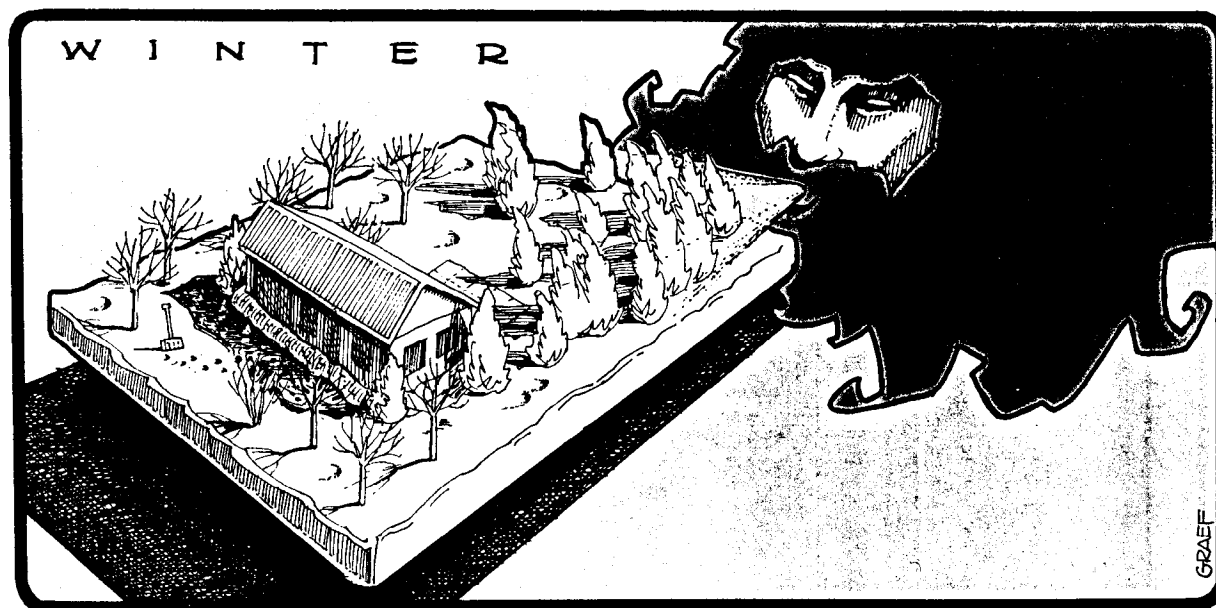
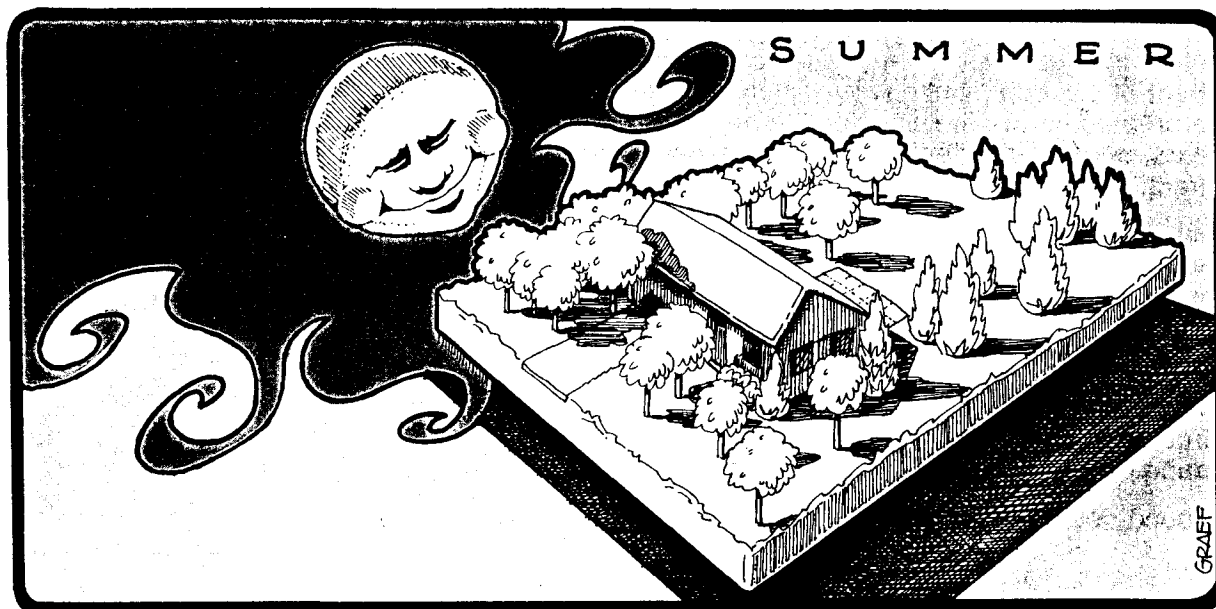
A lawn adds unity to a landscape design by linking together the various "rooms" of a landscape. It is also a good ground cover for recreation and service areas and for travel routes between use areas.

Publications on planting and maintaining lawns are available at county Extension offices.

Planting for Energy Conservation

Proper selection and placement of plants can reduce home energy consumption. Deciduous trees planted 15-25 feet away from the house on the east, south and west sides shade the roof and walls in summer, reducing surface temperatures. After the trees have dropped their leaves in fall, winter sunlight can reach the house to provide passive solar heating.

Windbreaks, mainly evergreen plantings, located four to six times their ultimate height away from the house on the north and west sides can reduce winds and winter fuel consumption. Foundation plantings also reduce winter heat loss. Vines can shade and cool house walls during summer. Maximum energy savings will not occur until your plants reach maturity. Publication G81N1178; "Designing an Energy – Efficient Home Landscaping" contains more details.



Landscape Structures

Most libraries, book stores and garden center offer a variety of publications that contain detailed construction plans and material suggestions for landscape structures. We discuss only the more common structures in this publication.

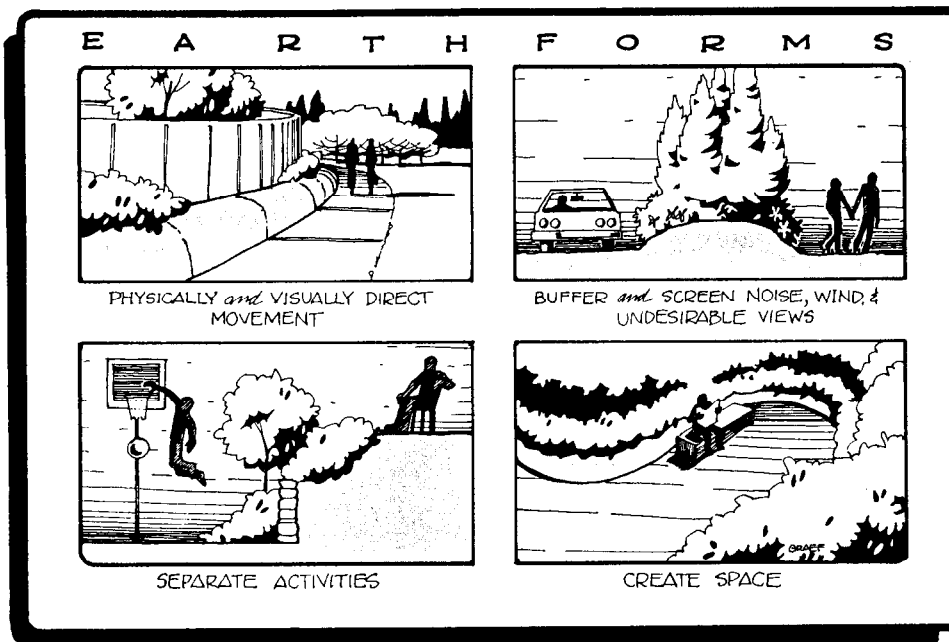
Grading

If your homesite is already graded and even partially landscaped, you probably won't want to change its contours. But if the final grading has not been done, you may be able to create the topography most appropriate for your landscape design.

Actually, the best time to think about changing a homesite's topography is before building begins. This is also the best time to decide whether shade trees and other plants already there should be saved. Mature trees and shrubs add thousands of dollars of value to residential properties.

If you want to keep existing plants in your landscape design, they should be protected before construction begins. Construction equipment can damage and kill trees by compacting soil in their root zones. A simple fence erected just beyond the branch spread of a tree will protect both roots and trunk from damage.

If you change the grade around an established tree, you must avoid changing the amount of air, water and soil nutrients reaching it. See Extension publication A3072, "Preserving Trees During Con-



struction", for details on how to accomplish this.

During rough grading, the topsoil should be stockpiled away from the immediate construction site. To protect this valuable soil from erosion for a short time, spread weed-free straw or marsh hay over it. If the topsoil is to be stockpiled for more than one season, seed the pile with annual rye grass, oats or another annual plant. When construction is completed, the topsoil should be spread evenly over the lot. A 4-6 inch layer is ideal, although two inches may be adequate if it is incorporated into the top six inches of soil.

Mounds, berms and changes in ground contour great enough to require steps or retaining walls help create an interesting landscape. But they should perform a specific function, such as outlining specific use areas or other lawn spaces, buffering noise or screening unwanted views. Mounds should blend into the surrounding topography and look natural.

Your ground elevation must match your neighbors' at lot lines. You can accomplish this with gradual grading or retaining walls.

Driveways

The driveway is an integral part of a home's public areas, providing access for both vehicles and pedestrians. At most homes, it is where visitors arrive, mail is delivered, trash is picked up and children play. It should be wide enough to accommodate pedestrians and vehicles at the same time. If you have enough space, consider constructing a turn court and parking area to permit the unhampered – and safe – movement of vehicles.

For safety, the drive should meet the street at a right angle, and plants or structures must not hamper a driver's vision. If the drive has a steep grade, try to design a nearly level area near the garage and at the street intersection.

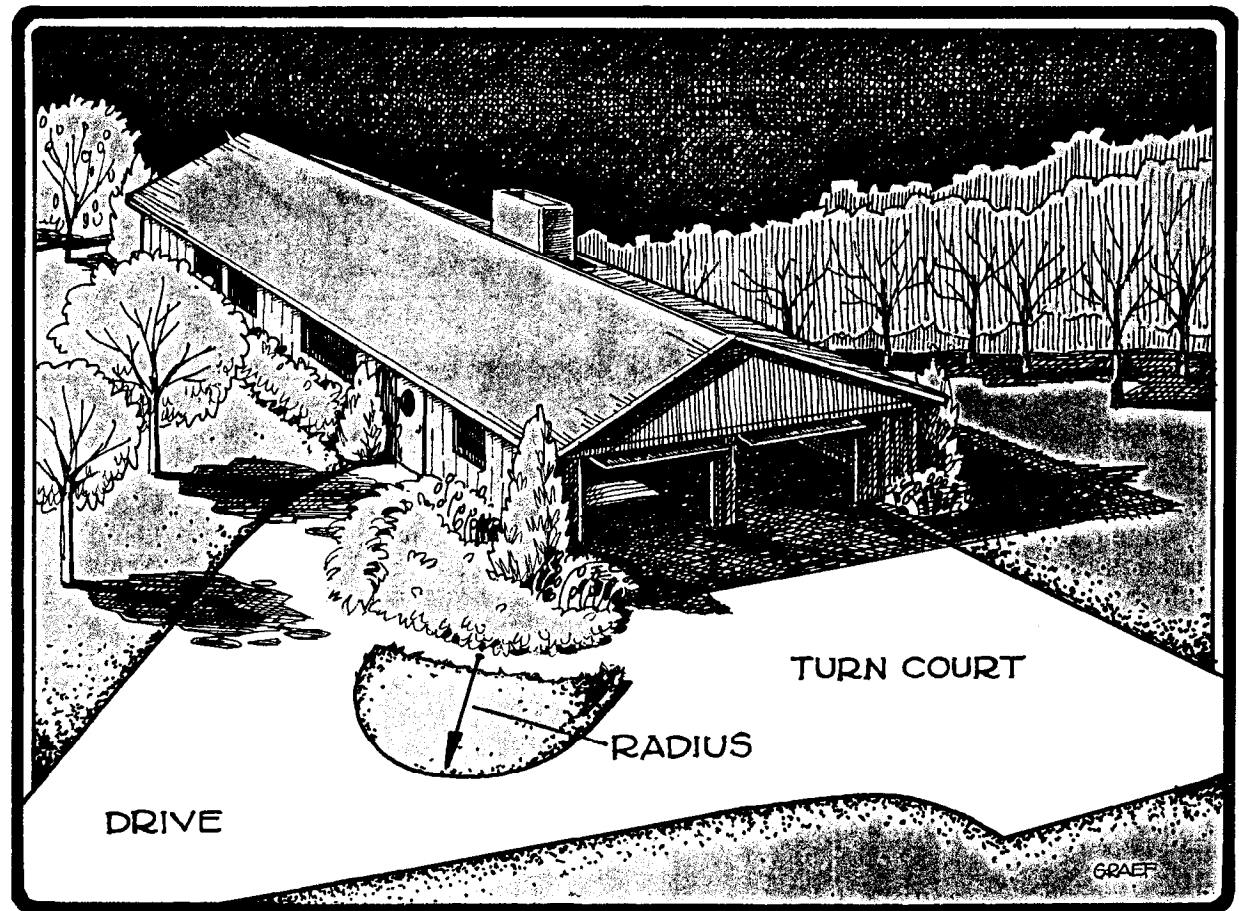
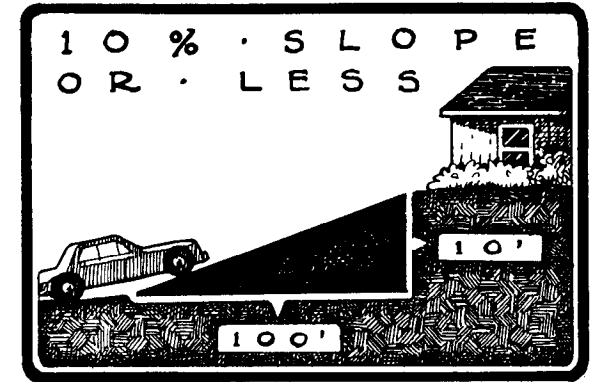
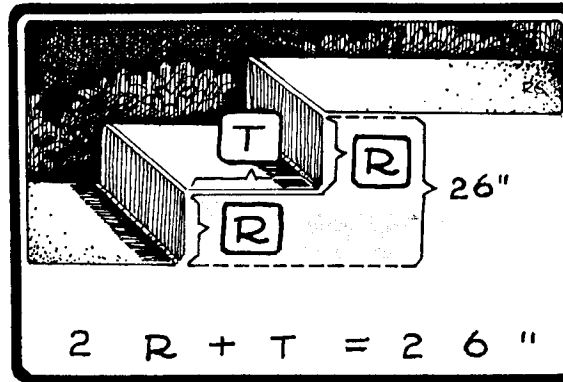
Driveways should have a slope of at least 1% (1 foot rise per 100 feet traveled) for proper drainage. But a slope of more than 10% will be hazardous in winter. Remember to provide space where snow can be placed in winter without damaging plants or structures.

We recommend that homeowners seek professional help to make sure that unusually long driveways or those on steep grades fit harmoniously into the landscape.

Walks

Most people find walks already in place when they move into a home. Typically, an entrance walk meets the driveway at a right angle and parallels the house to the front door. Unfortunately, in many cases the walk is too narrow for comfortable pedestrian use and too close to the house for proper plant growth.

An entrance walk should be at least 4 feet wide. A large house may require a 5-foot



walk for proper scale. If you have the opportunity to plan your entrance walk, leave at least 4 feet between it and the house. This will provide enough space for an entrance planting to accent the front door.

As for the driveway, plan the entrance walk for easy access and winter snow removal. A slope of 1-4% is ideal. For safety, the slope should be no more than 6%.

Steps

Where the ground slopes more than 6%, you will need to install steps to permit people to move from one level to another. No matter what the steps are constructed of, they should meet a long-established standard for safe and convenient outdoor steps: two risers (the riser is the vertical part of a step) plus one tread (the horizontal part) should have a combined measurement of 26 inches. The most common step dimensions are 5½-inch risers with

15-inch treads and 6-inch risers with 14-inch treads.

A pedestrian may not notice only one or two steps, so as a rule a set of steps should have at least three risers. If this isn't possible, use an eye-catching surface material or outdoor lighting to make the steps visible. Handrails make steps safer, especially in winter.

Decks and patios

If you want a deck or patio for outdoor living, plan for it carefully to make it useful in as many ways as possible.

Location is one important consideration. A patio or deck should be convenient to the appropriate areas of your house. If you will use it mainly for sunbathing, you'll probably want it off the bedroom. If you plan to eat or entertain there, place it near the kitchen or family room. Of course, door

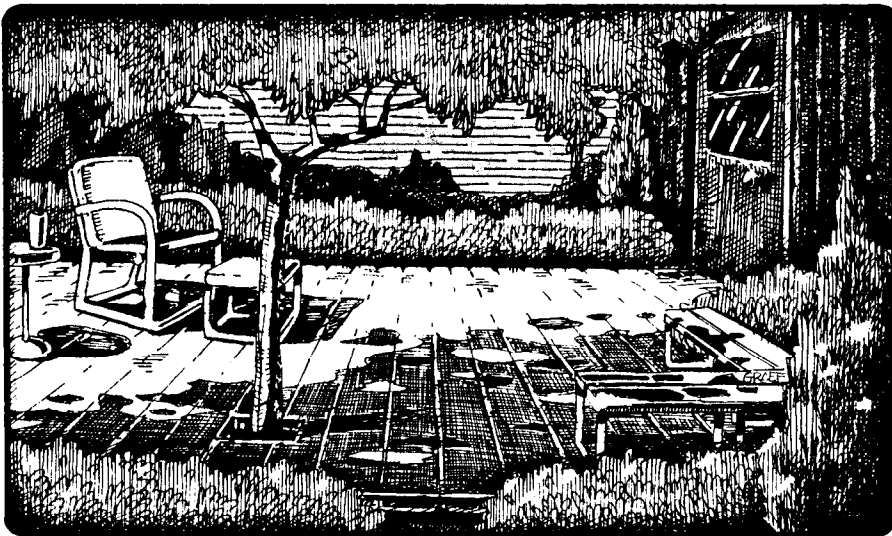
locations may limit your placement alternatives. Other factors to consider are exposure to sunlight, summer winds, good views and privacy.

Patio size will depend on what you want to use the patio for, yard space available and family size. We recommend about 64 square feet of hard-surfaced patio space for every family member.

A patio should have a 1-2% slope away from the house so water will drain away from the house.

A deck can provide a level outdoor area over steep ground. It should appear to be an extension of the house. Its color and texture should make it harmonize with the house and surrounding landscape.

The architectural lines of your home; choice of construction materials and other aspects of your landscape-design will all influence the shape of a patio or deck.



D E C K



P A T I O

Retaining Walls

Retaining walls are used to make abrupt changes in elevation, provide privacy and delineate outdoor space. Stone, brick, wood ties, timbers and concrete are the most commonly used materials.

For steep grade changes, a series of low walls is usually better than one high one. The higher the wall, the more it must be reinforced to withstand the pressures created by freezing and thawing in winter.

For both dry and mortared walls, careful planning and construction are essential. Consult detailed design books or seek professional assistance if you plan a retaining wall more than 4 feet high.

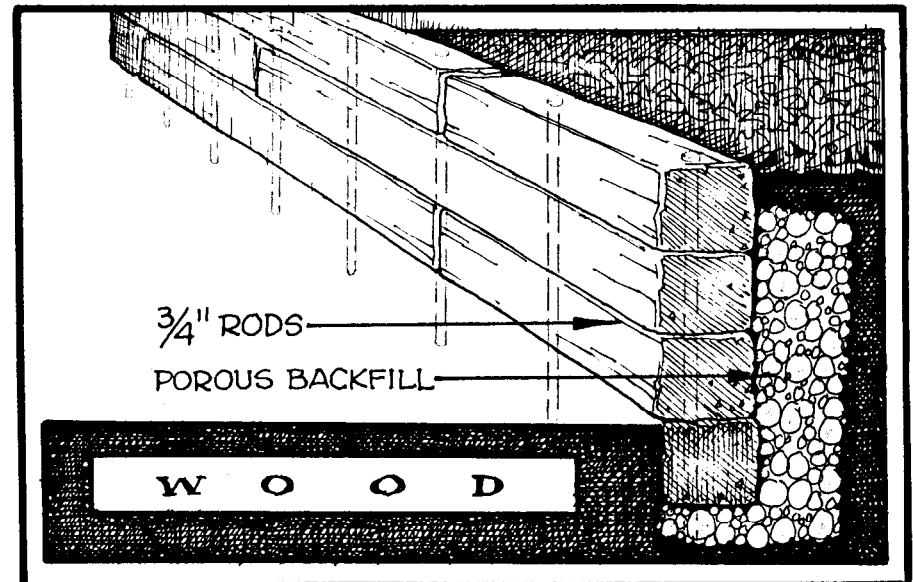
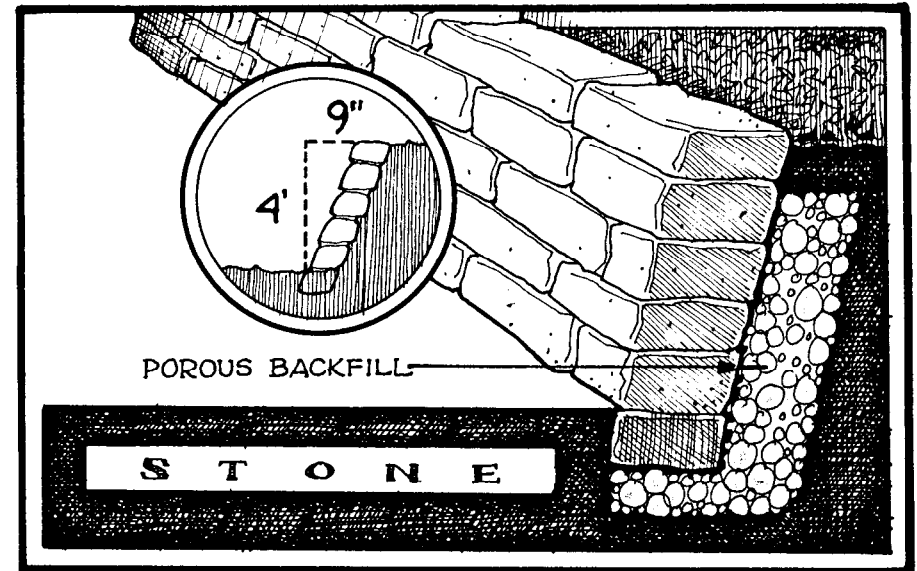
Fences

Fences, alone or in combination with mass plantings, provide privacy and enclosure in the home landscape. They also serve as windscreens, "poor-view" screens, accents, space dividers, sources of shade and backdrops for plants.

Fences may be constructed in a variety of styles and from many different materials. If you decide to build a fence, choose a style that complements your overall landscape design. Chain link fences, with or without plastic strips, rarely beautify a yard. Fences made of dark or neutral-colored natural materials usually do.

Lighting

Outdoor lighting can be included in your landscape design. Lighting walks and entrances makes them safer, especially during dark and slippery winter months. Soft overhead lighting extends the useful hours of patios and decks. With lights, you can highlight particular plants or structures. Low landscape lighting – no more than 3 feet from the ground – can help unify your entire landscape in the evening.



Low-Maintenance Landscapes

All plants and structures require some maintenance, but you have some choice as to whether your landscape will require a lot of maintenance or a little. Many homeowners enjoy lawn and garden work and knowingly choose plants and structures that require a lot of maintenance. Others want an attractive and functional landscape, but would rather not spend evenings and weekends weeding, mowing, watering, edging and pruning. If you are in the latter category, you should work toward a low-maintenance landscape.

Mulched planting beds usually require less maintenance than the same area of properly maintained lawn. Two to four inches of shredded bark, wood chips, ground corncocks or similar organic materials control weeds, retain soil moisture and moderate soil temperatures, while blending into the landscape.

We don't recommend placing a plastic sheet under organic mulches, but crushed stone, marble chips and washed gravel must be underlain with black plastic for effective weed control. These inorganic mulches can reduce aeration of heavy or poorly drained soils (while providing only limited moisture retention), and they sometimes reflect enough sunlight to damage plants. Crushed stone and marble chips introduce exotic colors which violate basic design principles in many situations.

For those areas where a lawn is necessary, use a mulching mower to avoid having to rake leaf clippings and to reduce fertilizer needs (by returning plant nutrients to the soil).

Edging around planting beds reduces maintenance time – by separating the beds from the lawn – and helps unify a landscape design. Select an edging material with texture and color that complement the house and other landscape structures – stone, wood, brick, steel and plastic are all available.

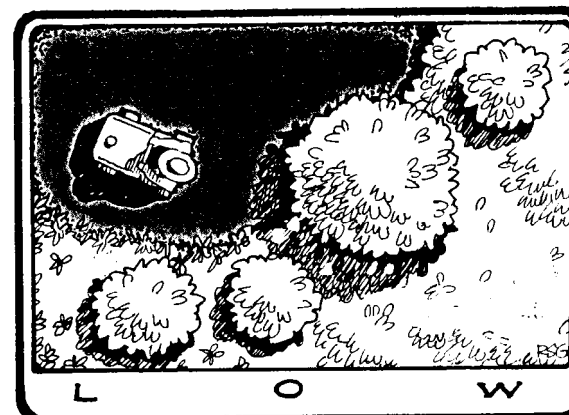
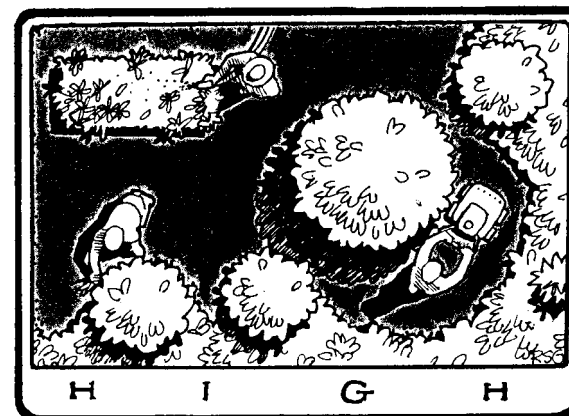
A perennial ground cover under trees and shrubs also reduces maintenance requirements. Most ground covers grow well in an organic mulch and, if planted at the right density, can even be used in place of a mulch.

Use well-adapted plants that will require minimal maintenance. It takes a lot of time to maintain unnatural plant forms like topiaries, espaliers and pollards.

Space plants properly during the initial planting. If you overplant, you will have extra pruning, trimming and thinning. If you underplant, you may have to fill in with more plants.

Planting flowers in containers and small planting beds makes annual planting and removal easier.

A “natural” landscape usually requires less maintenance than most conventional ones.



Finishing Your Landscape Design

Step 7. Putting It All Together

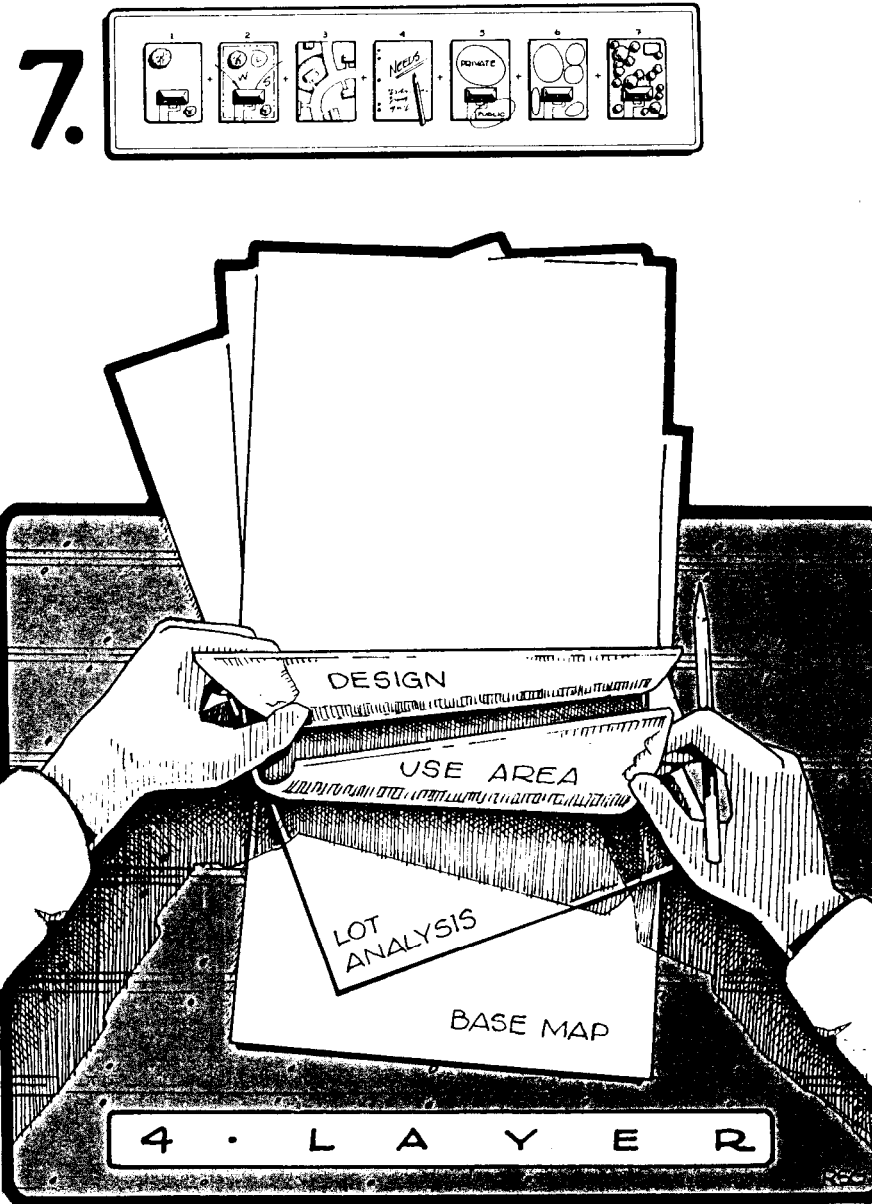
Once again, it's time to go back to the drawing board. Your last efforts there should have produced a number of alternative use area sketches. Now you will give exact shapes to the use areas you want and decide what plants and structures will create those shapes and a pleasing overall landscape design.

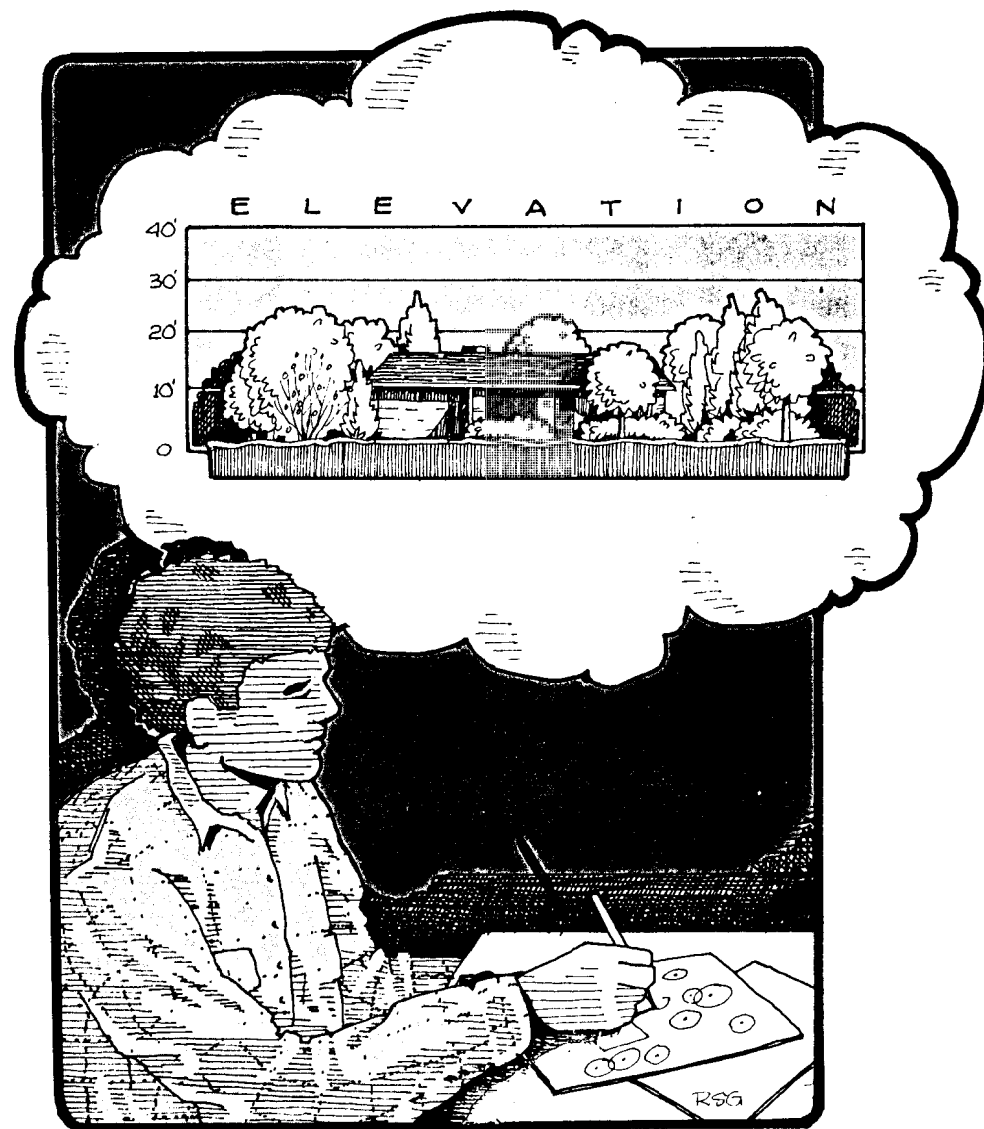
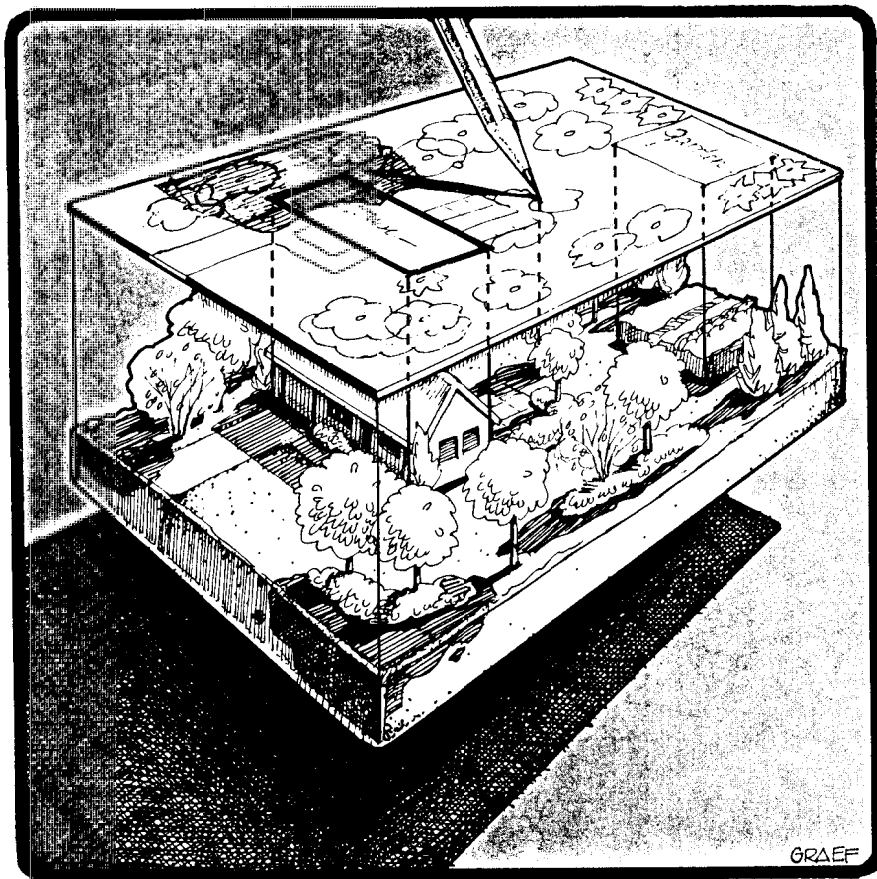
If it has been some time since you made the general use sketches you may want to retrace the steps that led up to them, by reviewing the first three sections of this publication. To complete a successful design, you need to have a grasp of lot, house, and neighborhood characteristics as well as general design principles.

On the drawing board, place the best use area sketch over your base map and lot analysis drawing. On top of this, place a clean sheet of tracing paper.

There are three parts to completing your landscape design:

- Draw exact shapes and locations of use areas, planting beds and landscape structures
- Identify specific planting sites
- Select plants and construction materials that meet your design requirements

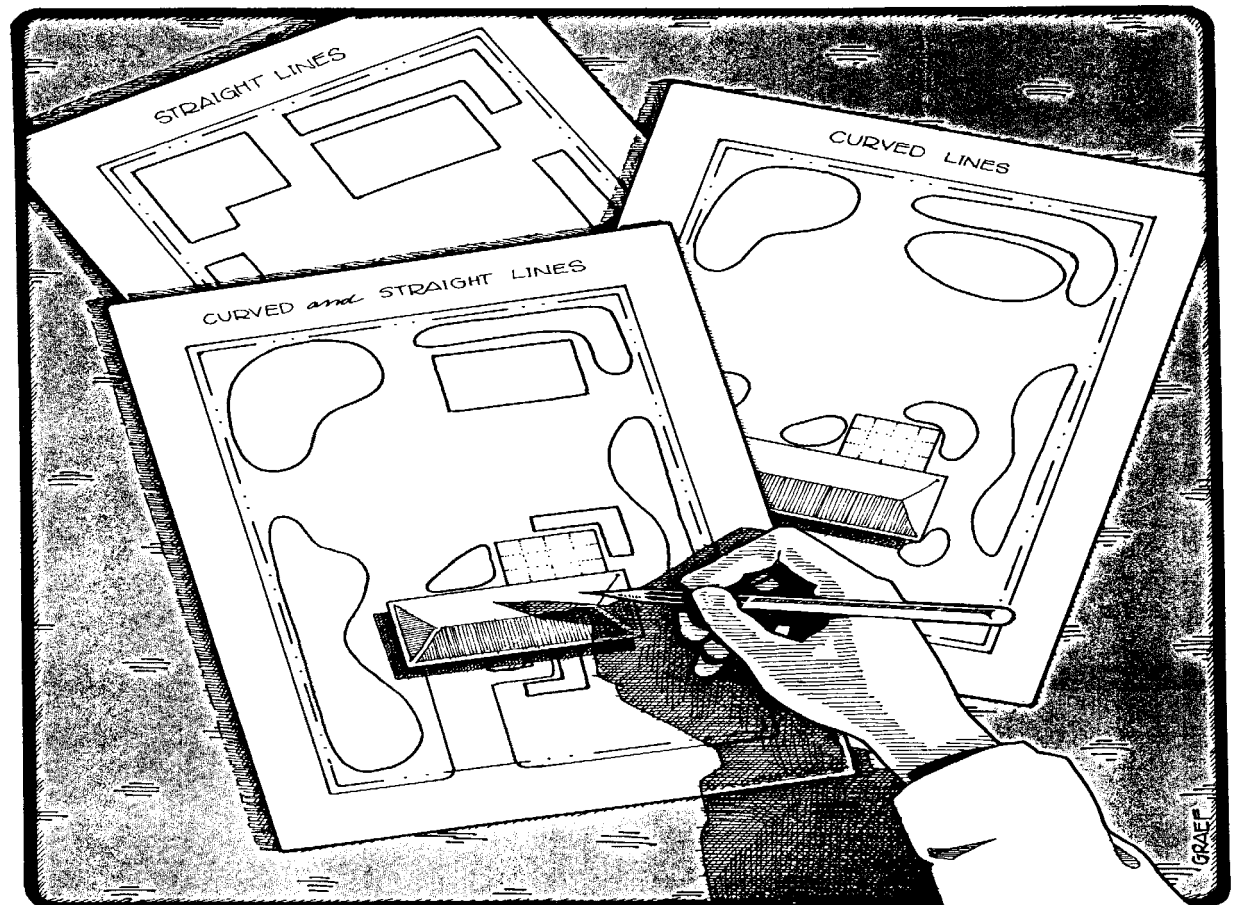




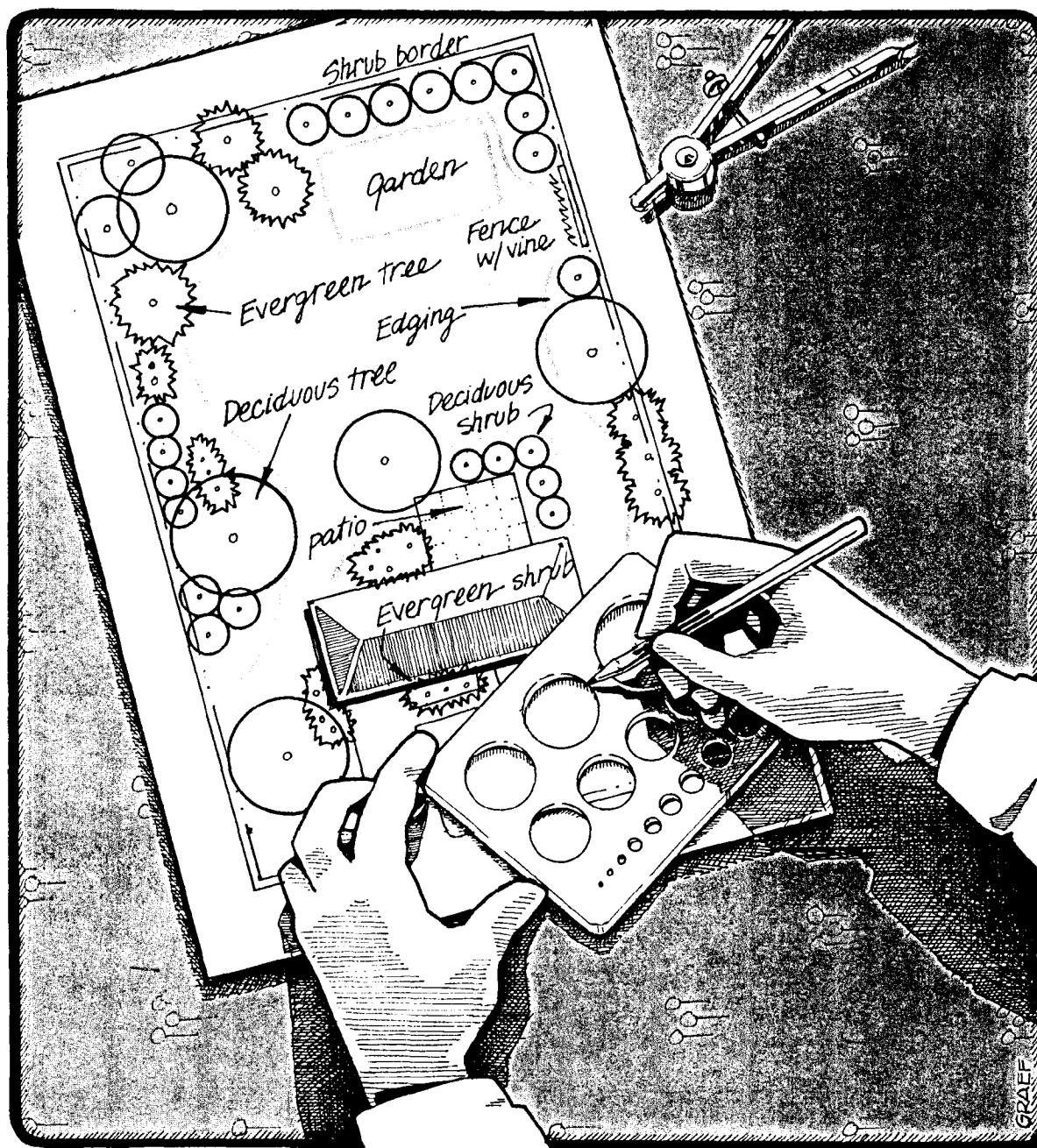
First, draw in planting beds and landscape structures that give shape to your outdoor use areas. As you draw, consider both function – energy conservation, screening poor views, enhancing good ones, etc. – and aesthetics – based on general design principles. You may want to review the relevant sections of this publication as you zero in on the most successful design.

Draw planting beds and landscape structures accurately to scale. You'll need some idea of the types of plants that will go into planting beds – deciduous vs. evergreen trees vs. shrubs, etc. – to make the beds the proper size.

Be prepared to draw several alternative designs. Professional designers usually draw several designs, try to improve them, then select the one that is best all-round.

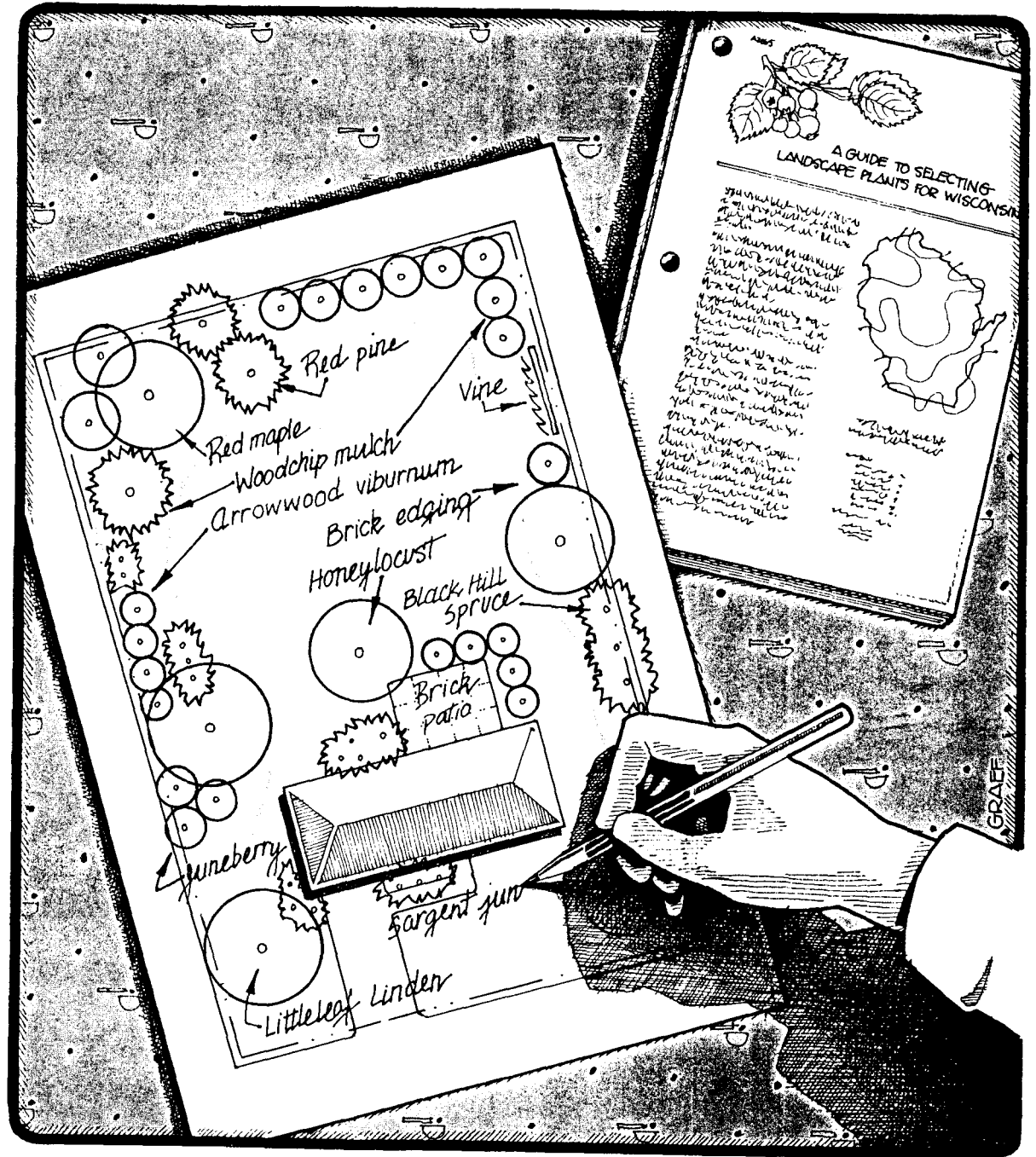


Second, identify exactly where plants should go, using appropriately sized circles on your drawing. Except for very large trees, which are usually drawn about two-thirds their maximum size, draw circles representing approximate mature plant spread. Unless otherwise specified in plant descriptions, spread is usually about two-thirds of listed height. You may want to differentiate deciduous and evergreen plants with different symbols.



Finally, decide what plants and building materials will fulfill your design requirements. The goal is to select plants that will grow well in your planting sites while providing forms, textures and colors that complement your design.

Also choose building materials whose textures and colors complement your design. Structures should blend in with house and plants. If you have a wood-surfaced house, for example, you'll probably want a wooden fence, and its color should be the same as or complement your house color.



For Further Reading

Many publications on subjects related to home landscaping are available through UW-Extension county offices.

Site planning

Catalog number

G8INH153 Planning a Play Area in Your Residential Landscape Design

Plant selection

A3382 Container Gardening
A2865 A Guide to Selecting Landscape Plants for Wisconsin
G1609 Landscape Plants That Attract Birds
A3434 Lawn Establishment
G2736 Prairie Primer

Plant care

A1771 Caring for Deciduous Shrubs
A1817 Caring for Your Established Shade Trees
A1730 Evergreens: Planting and Care
NCR356 Fertilizing Garden and Landscape Plants and Lawns
A3073 Identifying Shade Tree Problems
A3435 Lawn Maintenance and Problems
A1990 Lawn Weed Prevention and Control
NCR26 Lawn Weeds and Their Control
A3383 Mulches for Home Gardens and Plantings
A2305 Organic Soil Conditions

Plant care (continued)

Catalog number

A2079 Recognizing Common Shade Tree Insects
A3067 Selecting, Planting and Caring for Your Shade Tree
A2308 Tree and Shrub Fertilization
A2934 Turf Insect Pest Control Guide
A3134 Woody Ornamental Insect Pest Control Guide

Yard Care and the Environment is a series of publications developed by UW-Extension and the Department of Natural Resources. Titles include:

- *Rethinking Yard Care*
- *Shoreline Landscape Options and Plants*
- *Landscape Practices for Healthier Plants and Improved Water Quality*
- *Lawn and Garden Fertilizers*
- *Lawn and Garden Pesticides*
- *Selecting a Lawn Care Company*
- *Watering*

Other publications

Landscaping for Wildlife, available from the Department of Natural Resources, Box 7, St. Paul, MN 55155-4007. A landowner's guide to developing a beautiful yard that attracts wildlife.

Livable Landscape Design (1411B-211), available from Cornell University Distribution Center, Seven Research Park, Ithaca, NY 14850. Provides a fairly detailed reference on the process and principles of livable residential landscape design.

Basic books on home landscape design are also available at libraries, bookstores and garden centers.

For Assistance

Homeowners who need assistance with developing and carrying out a landscape plan can turn to several sources of professional and technical services:

Landscape architects are professional consultants who plan and design the arrangement of outdoor areas. Of all the sources of landscape services, only landscape architects offer assistance with site selection and planning, preparing alternative plans and selecting a final plan that includes plants and hard-surface materials and working drawings. Some states have regulatory laws governing the practice of landscape architecture. Wisconsin does not require licensing, but only a person who has a degree from an accredited program can properly be called a landscape architect. Most landscape architects specialize in planning and design and do not sell plants or other materials or do landscape construction, in contrast to the following segments of the landscape industry.

Nurserymen grow plants for wholesale or retail sale. Some may offer landscape design assistance, particularly with plant selection and placement. Some may do the planting. Some nurseries operate garden centers.

Landscape contractors specialize in landscape construction. They do rough and finish grading, seeding and sodding, concrete work for drives, walks and low retaining walls. They place landscape plants and supply topsoil, asphalt and other construction materials. Some install fences, decks, patios, sprinkler systems and pools. As a rule, landscape contractors do not grow plants, operate garden centers or offer extensive design assistance.

Garden centers sell seeds, fertilizer and plants that they may or may not have grown themselves. Most sell a wide variety of materials, including bedding plants, pottery and patio and lawn furniture. Some may deliver large plants, but few install them. Some garden centers offer limited planting design services.

Most **sod producers** sell sod wholesale, but some retail and install sod for homeowners. As a rule, they do not offer landscape design services.

Landscape industries that offer some landscape design services may employ **landscape horticulturists** – trained specialists in ornamental horticulture who may have some experience in planting design – and **landscape designers** – individuals who may have some experience in residential design, but not necessarily any formal training in landscape design.

Editing, Jerry L. Mosser
Graphic Design, Martha Fish
Illustration, Renee Graef



Authors: Dan A. Wilson and Thomas J. Wilson are University of Wisconsin–Extension community resource agents in Washington and Marathon County, respectively. Both are landscape architects. Wayne G. Tlusty is a professor of landscape architecture at the College of Agricultural and Life Sciences, University of Wisconsin–Madison and the University of Wisconsin–Extension, Cooperative Extension.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Wisconsin–Extension, Cooperative Extension. University of Wisconsin–Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. If you need this information in an alternative format, contact the Office of Equal Opportunity and Diversity Programs or call Extension Publishing at 608-262-2655.

© 2003 by the Board of Regents of the University of Wisconsin System. Send inquiries about copyright permission to: Cooperative Extension Publishing Operations, 103 Extension Building, 432 N. Lake St., Madison, WI 53706.

To see more publications or to order copies of this publication, visit our web site at <http://cecommerce.uwex.edu> or call toll-free: 877-WIS-PUBS (947-7827).

Planning and Designing Your Home Landscape (G1923)

RP-02/2004